

Science and Mathematics Education Centre

**The Role of the Tutor in Supporting Online Engagement in
Higher Education**

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Doctor of Philosophy
of
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DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

A handwritten signature in black ink, appearing to read "D. H. O'Neil".

July, 2014

ABSTRACT

Research on teaching and learning within online asynchronous learning networks over the past 20 years has investigated the process of learning and the types of pedagogy conducive to effective student outcomes. Current theories of learning emphasise the value of dialogue for student engagement and achievement. In any education setting, it might be considered essential for the tutor to be seen as the expert who plans the teaching, motivates the participation and facilitates the learning. These issues are relatively well researched and understood within the face-to-face classroom. However, with the rapid growth of online learning programs, questions have been raised about the quality of student interaction and the tutor's role within that interaction.

To generate insights into the role of the tutor in supporting online student learning, I studied the online interactions of pre-service teachers enrolled in a large Western Australian University's Bachelor of Education Primary Degree, which is completed fully online. Large numbers of students are supported by a teaching cohort of mainly part-time sessional off-campus staff, all experienced schoolteachers but generally inexperienced in this style of teaching. My study drew upon the Community of Inquiry framework (Garrison, Anderson & Archer, 2000), using it as a lens through which to examine the beliefs and practices of tutors and relate them to engagement within an online teaching environment. I also reviewed key literature in online teaching to explore the various dimensions of what it means to be an online teacher educator.

I collected data about four pre-service teachers' online interactions when tutoring four separate groups of first-year undergraduate students using focus group

interviews, analysis of online transcripts, and individual interviews. The key findings of the study were:

- Online transcript analyses (as an aspect of the COI Teaching Presence concept) are an important and useful gauge of tutor-student interaction;
- Effective development of an interactive, engaged community of learners takes time, commitment and training for both tutors and students;
- Reflective professional learning should be an integral and ongoing aspect of online teaching.

My recommendations provide university educators with new insights into ways to support the learning and preparation of pre-service teachers who complete their courses in an online environment.

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CHAPTER ONE

Introduction and Context

This chapter introduces the study and lays the foundation for this thesis. It provides extensive background information and identifies the focus of the study by outlining the research objectives, methodology, design, significance and the overall thesis structure.

Background to the Study

The research took place in a large public university in Western Australia (termed the West Australian University) between 2011 and 2012. This university has over 40 000 students and one of Australia's largest international student populations. It maintains campuses in Malaysia and Singapore and its staff conduct face-to-face teaching in several other countries. It has the highest enrolment of Indigenous Australians of any university in Australia, and it is committed to the provision of regional education within Western Australia through campuses and education centres spread across the state.

The university has made a significant commitment of resources to online learning in order to meet the growing demand in higher education for contemporary learning methodologies that offer students more choice and control over the structure, sequence, method and timing of their learning activities. The largest flexible learning project is located in the School of Education, which sits within the Faculty of Humanities. The School of Education offers five pre-service teacher education courses, three language courses, four postgraduate courses and five higher degree by research courses.

Through a partnership with an online provider in the delivery of an online version of the Bachelor of Education Primary degree, the School of Education

quadrupled its enrolment in the first year of the degree (2009), with numbers growing steadily in each successive year. The course provides students with the skills, experience and knowledge to teach children aged from five years to 12 years in government, Catholic and independent schools.

The Bachelor of Education (primary course) is offered in three modes, each with the same structure and units regardless of whether it is taught on campus, regionally or online. The units all match in content and assessment and each mode utilises Blackboard as the Learning Management System (LMS). The online iteration is offered through a partnership with an online provider, with open access to students for six of the eight first-year units; this allows students who would not normally be able to enrol in university study access to these open units. Successful completion of two of these units allows students a pathway to enrol into the full degree program. Students from all states in Australia and internationally are attracted to the course, and some units attract enrolments of over two thousand students. These students come to study from a variety of backgrounds that are not necessarily typical of a first-year university student cohort. Many have not studied for a long time, some left school before completion of Year 12, some are in full-time work and looking for a career change, others have English language problems – and most could be described as technologically inexperienced, lacking the skills necessary for negotiation of Blackboard and an online learning environment (O’Hare, 2011).

The main difference between the online course and the on-campus equivalent is in the availability of course content. While the on-campus units are offered across two semesters each year, the online iteration is offered over four teaching or study periods each year. Each alternative study period is identical, meaning that students have two opportunities to enrol in each unit within each year. Teaching periods one

and three offer the same units (equivalent to semester one of the on campus iteration) and teaching periods two and four offer different units (equivalent to semester two of the on campus iteration). This offers great flexibility for students and allows them to fast-track their course, meaning that many can complete online in only three years a course that would take four years to complete on campus. This is clearly an appealing proposition for many students, many of whom put their lives on hold to change their career path into teaching.

The Focus of This Study

I have been involved in this university's online teacher education program since the first enrolment of students in March 2009. I taught as a tutor in one of the units in the first study period, and took over the role of program coordinator for the second study period onwards. I remained in that position until moving interstate at the end of 2011. As it was a new initiative we encountered many challenges in those early days, and a large aspect of the role of program coordinator was ensuring that high-quality schoolteachers (known as online tutors throughout this study) were employed and allocated into appropriate teaching groups according to qualifications, experience and expertise. None of the tutors had taught online before, but a few had completed some online study. There was an urgent need to give the tutors the appropriate training and support to ensure that they in turn could support their students, who were studying to be primary schoolteachers. In the absence of existing research on the topic, I set out to develop an understanding of the role of an online tutor through a mixed-methods examination of online interaction.

Researchers have identified that one of the strengths of an online learning environment is the ability to provide rich educational experiences that give students opportunities to enhance their knowledge and skills through the use of a large range

of technological tools (Laurillard, 2002; Zemsky & Massey, 2004). Curriculum designers and teaching staff within West Australian University's Bachelor of Education online program have to ensure not only that the quality of the technology assists in learning the theories and concepts required, but also that the technology supports the prospective teacher's role in the classroom when the degree is complete. To ensure the effectiveness of such a program, it is important to understand the variables that impact on student learning, and more particularly in this case, the variables that impact on the role of the tutor.

One of the key distinguishing features of online learning that differentiates it from distance education is in the interactive opportunities between tutors and students via online asynchronous discussion forums (Mazzolini & Maddison, 2003). However, interaction is a complex and multifaceted concept (Anderson, 2008). Although online learning offers flexibility for students to collapse time and space (Cole, 2000), it is essential that the learning materials and activities are carefully designed and implemented in ways that support students in effective engagement that then encourages high quality learning. As Berge (1999) and Northrup (2001) both noted, effective online interaction does not just happen. In online learning, there is a real risk that interactional situations could result in communications that are more typical of a Facebook conversation than a high-quality educational experience with real engagement. In terms of the 'engagement theory' of learning (Kearsley & Schneiderman, 1998), the essential, sought-after characteristic – high-quality collaborative learning – may be either missing or appear irregularly.

In the online environment the term 'interaction' has been expanded from the traditional notion of a classroom-based dialogue to a range of alternative discussion opportunities made possible by new technology. However, the success of any online

learning program requires more than a range of well-designed learning materials or technological tools. Without careful thought and intentional focus on the pedagogy, there is a risk that students will miss opportunities for meaningful learning in their online environment. There is a need for a range of support mechanisms with evidence of quality interaction and collaboration from both students and teaching staff. These tutors should be committed to motivating their students through the use of meaningful feedback and encouragement that assist in the development of contextual understandings through several areas of interaction. The following section outlines the process for online teaching at this university in Western Australia.

The Online Teaching Process

In the School of Education, the online teaching component is organised in the following way. The university employs part-time tutors who act as a human interface between the university and its students. Each tutor is a qualified schoolteacher with recent classroom teaching experience, and is responsible for a group of around 75 students, giving content specific support for learning through the LMS site designed to encourage collaborative learning. All of the education units have exactly the same content and objectives as their on-campus equivalents, as specified in the university's unit outline. However, the weekly tasks and activities have been adjusted to allow for online interactions and engagement.

It is important to gain an understanding of the challenges and opportunities that online teaching and learning can offer. It is equally important to understand the dynamics, its processes and outcomes and the conditions for success. According to Garrison et al. (2000) three key elements are required in an interactive learning environment: *cognitive presence*, *social presence* and *teaching presence*. In this study I used the element teaching presence to frame the investigation.

Research Objectives

University educators need to learn more about how university tutors use their interactions to encourage high-quality learning in an online environment. My study was designed to explore the ways in which tutors support learning through their online interactions, and examined strategies intended to make the online teaching and learning experience more effective for both tutor and learner.

Key Objective:

To establish how online tutors demonstrate and account for their levels of online teaching presence.

Research Questions:

- 1. What proportion of online discussion is characterised by teaching presence examples of instructional design and organisation?*
- 2. What proportion of online discussion is characterised by teaching presence examples of discourse facilitation?*
- 3. What proportion of online discussion is characterised by teaching presence examples of direct instruction?*
- 4. Which teaching presence components do tutors believe are important in supporting learning?*
- 5. Which factors impact on tutors' ability to provide a visible online teaching presence?*

Based on the results from analysis of the data produced in response to the five research questions, I developed a framework to address the following question:

- 6. What pedagogical strategies can be implemented to enhance collaborative learning in online education programs?*

In summary, my study investigated the complexities of online learning discussion groups and their potential to support learning. The interactive processes of teaching staff were explored with critical components of online teaching identified through an analysis of the online discourse. I developed a pedagogical framework that will support teaching staff to gain knowledge and skills that can be used in a wider context.

Research Design

This research project was formulated by my desire to investigate the beliefs and practices of online tutors. Using an explanatory mixed methods design, within an interpretivist research paradigm, I investigated the beliefs and practices of four tutors who taught together in one unit of an undergraduate pre-service teaching degree. I utilised the *Teaching Presence* element of the Community of Inquiry (COI) framework (Garrison et al., 2000) as a lens to view the issues involved in being a tutor in an online teaching degree. A case study approach was used to interpret the data that emerged about the beliefs that tutors held about the complexities and nuances of online teaching. The use of case studies allowed for a rich, in-depth examination of the processes involved in online teaching. This research approach gave voice to the practitioners being studied, allowing them to reflect and communicate with others, supporting an improvement in the practices of teaching and learning in an online environment. Qualitative and quantitative methods were employed to collect data, including focus group interviews, analysis of the content of online discussion transcripts, and individual interviews.

Significance of the Study

This research complements other research using the Teaching Presence element of the COI framework (Garrison et al., 2000). It adds to the scholarly

research and literature within the field, because this framework has not commonly been applied to a first-year undergraduate pre-service teachers' learning environment.

Because of the growth of online learning within the Australian university sector, the results are relevant to the local and wider community where there is a recognised need for re-examination of current educational and training practices. In addition, the study highlights some crucial issues that require consideration in the design and development of online courses that encourage collaborative learning within their model. The study provides academic teaching staff with an evidence-based model of suggested practice, including relevant examples of how that practice can be supported through targeted areas for professional learning.

My recommendations provide university educators with new insights into ways to support the learning and preparation of pre-service teachers who complete their courses in an online environment.

Definitions of Key Terms

Asynchronous – occurring at different times.

Computer Mediated Communication (CMC) – communication that occurs through the use of two or more electronic devices.

Critical Thinking – thinking by actively conceptualising, analysing, synthesising and evaluating.

Discussion Forum – a discussion area within an LMS where staff and students can post messages and respond to posts made by others.

Engaged Learning – responsible, active learning through collaboration with others

Learning Management System (LMS) – a password-protected online learning environment that allows students access to learning materials and activities related to their study from any location with Internet access.

Online Learning Environment – students study fully online with all resources, learning activities and opportunities for engagement, provided within an LMS.

Pedagogy – the art and science of how something is taught and how students learn it.

Pre-Service Teacher – a student teacher who has not yet completed training.

Tutor – an educator who teaches university students.

Structure of the Thesis

This thesis is presented in ten chapters. *Chapter One* has given background to the study and provided a rational and research focus. It has also provided a brief overview of the methodology and organisation of the thesis. *Chapter Two* contains a review of the relevant literature in the field, building the necessary theoretical foundation by examining areas of online learning and constructivist learning theories, defining meaningful learning and interaction, discussing pedagogical implications and the importance of community, and highlighting the role of the tutor and the COI framework. In addition, it gives details of the theoretical framework that guided the design and informed the findings. In *Chapter Three* I outline the methodology and research design, and present the data collection and analysis processes. *Chapter Four* presents the data and analysis for the focus group interviews. Each of the following four chapters, *Chapters Five, Six, Seven and Eight*, follows the same structure and presents the results and findings derived from the analysis of the four individual case studies. In *Chapter Nine* I build on the analysis

of the four case studies and describe my cross-case analysis, relating the findings to the initial research questions. The final chapter, *Chapter Ten*, contains a discussion of the findings and makes comparisons to previous research. I offer a model for effective practice and suggest recommendations for related professional learning.

Chapter Summary

This initial chapter has laid the foundation for this thesis. It provided some background information and identified the focus. It outlined the research objectives and briefly described the methodology, design, significance and the structure of the thesis. The subsequent chapters provide a detailed report of the study. Chapter Two reviews the relevant literature and presents the theoretical framework that underpins this thesis.

CHAPTER TWO

Review of Relevant Literature

In the previous chapter, I introduced the context, background information and design for the study. In this chapter, Chapter Two, I review the relevant literature, present the theoretical framework that underpins this thesis, and explore critical aspects of online learning, namely:

- constructivist theories of learning;
- meaningful learning;
- interaction;
- pedagogical challenges;
- collaborative learning;
- sense of community;
- the role of the online leader; and
- the COI framework.

Background

Online learning is a large growth area in higher education internationally; it is popular with students because of its provision of flexible access to content and instruction, from any place at any time, through digital information and communication technologies (ICT). Wiley and Hilton (2009) outlined six technological developmental changes that they consider are critical for higher education providers to recognize and understand: from analogue to digital; from tethered to mobile; from isolated to connected; from generic to personal; from consumers to creators; and from closed to open resources (p. 2).

In addition, researchers have flagged a need for this new breed of connected learners to be provided with more authentic learning opportunities that allow a focus

on real-world complex problems and their solutions (Herrington, Reeves & Oliver, 2007).

Rapid developments in technology and social software have strongly influenced how learners access information and knowledge, as well as how they interact with their tutors and peers (Siemens, 2005). This student flexibility is appealing to educational institutions that are able to make their courses available to students who cannot, or who choose not to, attend traditional face-to-face classes. It also has implications for teaching; while some principles of quality online teaching are similar to those in an on-campus setting, there are important differences that require investigation (Miller, Hahs-Vaughn, & Zygouris-Coe, 2014). Increasing student diversity has necessitated the development of more flexible teaching and learning methodologies (Snyder, 2009), and over the past 10 years, many educational institutions have offered their courses within an online environment, with numbers growing steadily internationally. Over 6.1 million students were enrolled in at least one online course in the United States in 2010 (Allen & Seaman, 2011). China has almost 70 different online colleges. In the United Kingdom 77% of universities are strategically planning for their online education offerings, with 87% of those universities planning to increase their online offering in the next five years (Higher Education Funding Council for England, 2010). Australian universities recorded a 5.4% increase in on-campus study and a 25.7% increase in online study between 2009 and 2010, with the Australian online education industry overall experiencing annual growth of 22.4% (Dyment, Downing & Budd, 2013).

This growth in online study is not surprising. Enrolment through online courses offers several advantages to students as well as for educational institutions, with these benefits well documented across a range of higher education discipline

areas. Programs are accessible from anywhere and study can be structured around job or family responsibilities. Online learning allows access to non-traditional students and to students who live in remote or regional areas. Courses can be streamlined, condensed, or accelerated, with researchers such as Laurillard (2002) advising that educational institutions need to “meet the demands of the knowledge society and take full advantage of the possibilities technology presents” (p. 1) rather than perpetuating the transmission model that she believed was the norm for many teaching staff. Herrington et al. (2007) argued that the development of immersive learning technologies create opportunities for students to be increasingly involved in tasks completed within real problem-solving situations that are both engaging and complex, where students are required to collaboratively identify the tasks needed to complete open-ended, ill-defined activities through the use of a variety of resources.

Through Computer Mediated Communication (CMC), students converse and collaborate online using such technologies as asynchronous discussion boards that give students flexibility to post and reply to messages in a discussion forum within their own time frames and commitments. However, not all educators are convinced that there is evidence of quality and cost effectiveness within these online programs. Despite large interest and investments by educational institutions worldwide, there is a feeling that there has been limited research into what constitutes a quality or effective online learning or teaching experience (Reushle, 2005). Theorists advance the practice of more constructivist and authentic approaches to online learning. However, online educators have described difficulties with the design constraints of the LMS that may encourage the use of “conventional, structured and linear approaches” (Oliver, Harper, Wills, Agostinho & Hedberg, 2007, p. 85). Additionally, both learners and tutors can lack the necessary abilities and experience

(Vlachopoulos & Cowan, 2010) and institutional expectations can be unrealistic (Palloff & Pratt, 2011). New technologies offer the potential to change teaching and learning through interactions that can be customised to match student requirements (Levine & Sun, 2003). However, there is also evidence that many technologies create a new layer of complexities for tutors (Coates, 2006) and that many courses use the technology to focus on delivery, rather than on improvement of teaching (Reeves, Herrington & Oliver, 2005). Importantly, many instructors avoid online teaching. They justify their decision by identifying insufficient institutional support or incentives, having to change a teaching mindset, intensive workload in design and delivery, large class sizes, difficult working hours and notions of being continuously on call (Conceicao & Lehman, 2011).

As noted earlier, my study investigated the types of online instructional interactions that tutors believe will support student learning. In the following section I review the most recent and relevant thinking around learning theory.

Constructivist Theories of Learning

Within the field of tertiary education, we are currently moving from theories of learning that emphasise individual thinking to theories that emphasise the social nature of learning (Barab & Duffy, 2012). Researchers believe that learning occurs most effectively via the creation of mental structures through collaboration with peers rather than the acquisition of knowledge as an individual, isolated process (Zenios, 2011). Based on a belief that knowledge cannot be taught but must be constructed by the learner, students learn best when they are actively engaged with the content and when they are encouraged to build their own knowledge through interactions with others (Anderson, 1995; Anderson & Garrison, 1995; Biggs & Moore, 1993; Dowson & McInerney, 2003; Jonassen & Reeves, 1996). This

constructivist style of teaching and learning is core business within any primary school classroom, where schoolteachers emphasise the role of the learner as being an active participant who uses previous experiences to build new ideas and concepts with the “constant dialectical interplay between construing and constructing” (Candy, 1991, p. 272) being at the centre of the education approach. Coates (2006) defines this as “constructivism, as opposed to instructivism” (p. 730). Constructivism and its associated theories in psychology and education have driven a paradigm shift for many tertiary educators and instructional designers towards a view of learning that is more social, conversational and constructive than earlier transmissive views of learning. However, as identified earlier in this chapter, bringing this style of teaching to an online environment is not without some problems.

Duffy and Cunningham (1996) distinguished between cognitive constructivism and social constructivism.

Cognitive constructivism

Piaget’s constructivist theory of knowledge (1977) has had a profound effect on the understanding of cognitive development and learning in education. He contended that children progressively enrich their understanding of things by acting on and reflecting on the effects of their own previous knowledge, and are able to organize their knowledge in increasingly complex structures. For Piaget, cognitive development occurs through interaction with learning activities when assimilating new to old information and accommodating old knowledge to new facts (Geer, 2005). He argued that learners do not copy or absorb ideas from the external world, but rather they construct their concepts through active and personal observations and experimentation (Juwah, 2006). In the university setting, individual learners are

encouraged to be active constructors of their own knowledge, with the tutor providing the activities but stepping back to be a facilitator of the constructive engagement (Vlachopoulos, 2008).

Social constructivism

Vygotsky (1978) emphasised the sociocultural context for learning. For him, learning is not only a mental activity shaped by external stimuli (Vlachopoulos, 2008); rather, knowledge is socially constructed when groups of people work together to solve problems. Knowledge is generated through social interactions that support an accumulation of levels of knowledge. Central to this theory is the concept of the zone of proximal development (ZPD) as the “distance between the actual development level as determined by independent problem solving and the level of potential development as determined by problem solving... with more capable peers” (Vygotsky, 1978, p. 86). Vygotsky’s concept heavily influenced Lave and Wenger (1990), whose socio-anthropological account of learning communities can be thought of as a “situative description of the ZPD” (Mishra & Juwah, 2006, p. 271). In these participation exercises, according to Vygotsky, assigned activities should be at a level that is slightly above the individual student’s level of understanding, but can be accomplished in a group where learning and knowledge building evolves through collaborative efforts in a process of negotiation in discourse communities within a social context.

When considering a model of online teaching and learning (as in my study), it is useful to refer to Anderson and Dron’s (2011) summary of this learning theory, stressing the importance of:

- new knowledge as building upon the foundation of previous learning;
- context in shaping learners’ knowledge development;

- learning as an active rather than passive process;
- language and other social tools in constructing knowledge;
- metacognition and evaluation as a means to develop learners' capacity to assess their own learning;
- learning environment as learner-centred and stressing the importance of multiple perspectives; and
- knowledge needing to be subject to social discussion, validation, and application in real world contexts (p. 85).

Collaborative constructivism

Bereiter and Scardamalia (1989) defined a third area of constructivism, in which the student is not only active with the content and with others in developing their understanding, but has a focus on learning that is planned and goal oriented. *Intentional learning* is seen as an important concept in the personal construction of knowledge where there is evidence of “cognitive processes that have learning as a goal rather than an incidental outcome” (Bereiter & Scardamalia, 1989, p. 63). These authors stressed the importance of learners taking responsibility for their learning by actively taking steps to advance their own knowledge; their ability to understand something new depending on what they already know. Educators cannot build expertise by having learners memorise experts' knowledge. New knowledge must be built on the foundations of already existing frameworks, through problem-solving activity and feedback given by the tutor (Mayes & de Freitas, 2007). There are persuasive arguments that state that higher-order learning, where learners are striving to achieve understanding of ideas, concepts and principles, requires engagement in some form of discourse (Yang & Goodyear, 2006) and allows a knowledge-building community to develop. A knowledge-building community is based on collaborative

constructivism and defined as any group of individuals dedicated to sharing and advancing the knowledge of the collective (Hewitt & Scardamalia, 1998).

Considerable research supports the view that it is the activity that the learner engages in, and the outcomes of that activity, that are crucial for learning (Beetham, 2007). As Beetham suggested, in online learning, the focus should be primarily on the activities undertaken by the learners, and only secondarily on the tools or materials that support them. She defined a learning activity as “a specific interaction of learner(s) with other(s) using specific tools and resources, orientated towards specific outcomes” (p. 47) and argued that these specific outcomes should ensure that the activity is meaningful to the learners and therefore encourage engagement. Krause (2005) defined an associated term, ‘engagement’, as being related to the time, energy and resources that students devote to the activities that are provided to support their learning. If that learning is situated in meaningful contexts, requiring collaborative processing, then learners are more likely to remember and make use of the information (Jonassen & Reeves, 1996).

It is clear that students are required to be *involved* in their own learning, but the active engagement of teaching staff is also required. A constructivist approach to learning must provide not only the environment and the tools for the active construction of knowledge but also the availability of appropriate feedback on the learner’s progress (Fowler & Mayes, 1999). Fowler and Mayes described learning as cyclical development that travels through three stages:

- *Conceptualisation*, in which learners interact with their own and other people’s concepts through an interaction with pre-existing understandings and new expositions;
- *Construction*, in which learners apply and test new conceptualisations as part

of their engagement with learning tasks to create their own framework of understanding; and

- *Dialogue*, in which learners create and test new conceptualisations through conversations with tutors and fellow learners (p. 10).

Within constructivist modes of online learning the educator is seen as a guide, helper and partner, with the content secondary to the learning process. For teaching staff to communicate in effective ways that support the learning process, they must have pedagogical and content expertise to support students in linking and developing their ideas through online conversations and interactions. Teaching presence is much more than facilitating learning; rather, it involves the creation of educational interventions and providing instruction when required (Anderson & Dron, 2011), supporting students formatively in ways that provide early feedback allowing them to monitor their input. However, this process can be complicated if tutors are to assess how learners go about constructing their knowledge rather than assessing a final product (Jonassen, 1991) and may require the up-skilling of tutors in new strategies for assessment that motivate students to structure their learning continuously during their studies (Race, Brown & Smith, 2005). Race, Brown & Smith argued that assessment processes should allow students to monitor their own progress in the development of deep and meaningful learning that builds from one subject to the next, rather than ticking off boxes, and “clearing their mind of the last subject in order to make room for the next” (p. 3).

Meaningful Learning

Meaningful learning has been defined in different ways. For Cleveland-Innes and Emes (2005), there are three different approaches taken by students in the learning process – deep, surface and achievement. They contend that when students

activate strategies that encourage learning that is *deep*, the materials are “embraced and digested in the search for meaning” (Garrison & Cleveland-Innes, 2005, p. 6). In contrast, those learners who choose to use a *surface* approach have an interest in completing the task with the least possible effort to achieve the outcome (usually a pass mark). These students have been identified as not being self-directed (Candy, 1991) and are not generally interested in assimilating the learning. Those students who are interested in *achievement* learning are those who are driven by a desire for high grades. Their reward is more in the grade than in the learning. During a course of study, students may choose to use a range of these strategies, using the most appropriate to their needs or interest at any one time. Although most educators involved in higher education encourage a deep and meaningful approach to learning, there also has to be an awareness of contextual factors that have an impact on the learning process (Garrison & Cleveland-Innes, 2005). This may be particularly relevant in an online environment, as in my own study, where a wide range of factors affects students’ engagement process. These factors are often the very reason that the students have chosen this form of learning, and include such aspects as work or family commitments, time available for study, familiarity with academic requirements and understanding of technology.

Meaningful learning has been identified as active, cumulative, goal-oriented and self-regulated (Shuell, 1990). It has also been defined as “a persisting change in human performance or performance potential ... (which) must come about as a result of the learner’s experience and interaction with the world” (Driscoll, cited in Siemens, 2005, p. 21). Meaningful learning is the ability to think critically, creatively and to be able to investigate, solve problems and synthesise information (Geer, 2005). Others suggest that thinking is of a higher order and involves the

capacity to go beyond the information given, to adopt a critical stance, to evaluate, to have metacognitive awareness and problem solving capacities (McLoughlin & Luca, 2000). Hence, critical thinking involves reflective thought processes that demonstrate depth, accuracy and astute judgement to determine the merit of a decision or theory (Alwehaibi, 2012). This then allows for the traditional view of creative thinking that involves analysis, evaluation and a synthesis of facts and opinions (Carmichael & Farrell, 2012). If students are working at a mere thinking level, they might demonstrate engagement that involves offering personal opinions or life experiences of a topic.

The challenge for tutors is to move students beyond offering personal opinion. Students should be prompted to research the existing body of knowledge and develop expertise in repeating the ideas and theories of experts in the field. However, although this is a step beyond personal opinion, this is not yet demonstrating critical thinking (Jones, 2013). To encourage learning that is meaningful, the types of learning activities that are created should be such that learners are encouraged to consider different perspectives, reflect on their own views and as a result, build new meanings. As identified by Jones (2013), the asynchronous classroom, as represented in this study, offers the potential to facilitate critical thinking skills. Because students are writing their discussion responses, there is therefore the opportunity for them to think and organise their thoughts before responding. However, although higher-order cognition can be developed through sustained interactions with others, its development takes time and experience (Geer, 2005), and needs to be supported by tutors who have created a sense of comfort and ease for students to post responses or ask questions.

Although learning occurs because of links with experiences and interactions

with content or other people, and the tutor supporting students in their learning, there is also a student responsibility to maintain those interactions through goal-setting and monitoring of engagement and performance. The creation of a critical community of inquiry is considered by many to provide a valuable context for meaningful learning (Garrison, Anderson & Archer, 2000), necessitating the construction and reconstruction of knowledge by questioning and challenging in collaborative and reflective ways.

Boud and Prosser (2002) developed a set of principles to describe high quality learning in higher education. Oliver et al. (2007) used those principles to characterise four essential elements with the potential to foster high quality learning in an online environment: learner engagement (where consideration is given to “prior knowledge and expectations”); acknowledgement of the learning context (where some thought is given to the position of the learning within the students’ “broader program” of study; learner challenge (where learners are encouraged to be “self critical” through active participation); and provision of practice (where learners “articulate and demonstrate” their learning through collaborative peer interaction (p. 87).

Interaction

Interaction is one of the most frequently discussed topics among online educators (Saab, 2005) with a range of definitions given in the literature. Interaction has been defined as mutual and reciprocal responses within online discussion (Zhu, 2006), and a critical component of the education process (Anderson, 2008). Kanuka and Jugdev (2008) suggested that, to provide students with meaningful learning experiences, online learning providers should offer programs that are socially and academically integrated, with Shin (2003) arguing that the perceptions of

psychological presence that are held by students around tutors and online peers are significant predictors of successful outcomes within the online environment.

Angelino, Williams and Natvig (2007) stressed the importance of the formation of cohort relationships supported through online interaction, and Juwah (2006) identified interactivity and interaction as key success factors underpinning the pedagogy of online learning. In another view, interaction is defined as “sustained, two-way communication among two or more persons for purposes of explaining and challenging perspectives” (Garrison, 1993, p. 16). Muirhead (2000) defined interactivity as “communication, participation, and feedback” (p. 1). Interestingly, Gilbert and Moore (1998) considered interaction and interactivity to be one and the same, defining it as reciprocal exchange between the technology and the learner while Wenger (2010) believed two quite different processes were involved. For Wenger (1997), interaction is a dual process of meaning making and seen as “an interplay and exchange in which individuals and groups influence each other” (p. 20) with the focus on human behaviour. On the one hand is the engagement in activities, conversations, reflections and other forms of personal participation, on the other the production of physical and conceptual artefacts – words, tools, concepts, methods, stories, documents and links to resources that reflect a shared experience (Wenger, 2010). He considers that interactivity has a focus on the characteristics of the technology systems that support the establishment of connections, stating that artefacts without participation do not carry their own meaning and participation without artefacts is “fleeting, unanchored and uncoordinated” (p. 179). Online interactions could not occur without technologies that allow high person-to-person, person-to-group and person-to-system interactivity (Roblyer & Ekhaml, 2000). From the student’s perspective, interaction is the communication between student and

subject content, student and tutor, or student and student (Moore, 1989), with each type of interaction having the potential to affect achievement and attitude to learning differently.

It can be seen that interactivity is a multifaceted concept that can be described to mean different things in a variety of contexts. Nevertheless, it has to be recognised as an important characteristic in instructional design, social context and success in online learning (Muirhead & Juwah, 2004). These authors offer a useful summary:

Interaction is a dialogue or discourse or event between two or more participants and objects which occurs synchronously and/or asynchronously mediated by response or feedback and interfaced by technology. The interactions (which can be categorised as learner to learner, learner to content, learner to tutor, learner to technology, tutor to content, tutor to technology, content to content) promote and enhance the quality of active, participative learning in a learning environment (p. 13).

Although many writers have stated that high levels of interactions are essential for both online and on-campus learning, there is little evaluative data to demonstrate that interaction in itself enhances the quality of learning in online courses, or that it leads to cognitive engagement. Cognitively engaged students are easier to identify in an on-campus class where they are seen giving sustained attention to a task (Zhu, 2006). For this to be obvious in an online environment requires evidence of conversations that demonstrate interpreting, analysing and summarising ability or higher-order thinking skills (Zhu, 2006). Despite interest in this concept spanning more than 40 decades, little research exists to indicate how much learning occurs, how it does or does not occur, and what factors most affect

outcomes (Beaudoin, 2002).

As noted by Dymment et al. (2013), online students can take one of two basic paths in completing their study. One group of online students choose to complete assessment tasks but do not participate or engage throughout a teaching period. The other group shows much more evidence of active engagement. Dymment and her colleagues also identified evidence that experienced online tutors developed powerful relationships and strong rapport with their active online students (2013). It is suggested that those tutors with more experience were more able to facilitate higher levels of interaction with and among their students. One might expect those students in the second group, who are the most visibly active, to achieve the highest grades. However, as Beaudoin (2002) argued, many students who show little activity in online interactions manage to succeed academically, with studies indicating that the more autonomous, self-directed learners are likely to also be more reflective and require less reinforcing support from peers. Many of these “invisible” students can be actively interacting elsewhere or in other ways, finding that participation on the LMS discussion board does not meet their needs. Beaudoin cited Fritsch (1997), who developed the notion of “witness learners” to describe students who – although not engaged through online written communication – were nonetheless engaged through *observations* of the written exchanges (Beaudoin, 2002, p. 2). Fritsch (1997) believed that this seemingly passive process also supports learning. However, Beaudoin (2002) identified that although those students who are invisible generally do as well as those students who are moderately visible, they do not do as well as their highly visible peers.

Confirming Beaudoin’s findings, in a study investigating performance differences among three groups of students identified as “workers, lurkers and

shirkers” (Taylor, 2002, p. 7), it was suggested that different patterns of engagement were related to performance. The 14 workers attained a Grade Point Average (GPA) of 5.43, the 17 lurkers a GPA of 5.41; seven of the shirkers did not complete their assessment, with the remaining five achieving a GPA of 4.3. Taylor (2002) suggested that, because the workers and the lurkers achieved similar scores, the notion of learning through legitimate peripheral participation is an effective learning style. Taylor argued that those students who have a more parsimonious approach to student engagement are at risk of failure, suggesting that the information that develops online, within a discussion board over the course of a teaching period, is a useful support for learning for both groups whether visibly active or not.

Bento, Brownstein, Kemery and Zacur (2005) asserted that two different forms of participation must be evident in online discussion forums. Students must engage with the content materials (content interaction) and each other (interpersonal interaction). These authors created a taxonomy that plots different types of participation into four quadrants of different types of learners. One half of the quadrant corresponds to content interactions with the other to interpersonal interactions. The four quadrants are defined as (Bento et al., 2005):

- *Active Learners* – high in interpersonal interaction and high in content interaction;
- *Social Participants* – high interpersonal interaction but low content interaction;
- *Witness Learners* – low interpersonal interaction but high content interaction; and
- *Missing in Action* – low interpersonal interaction and low content interaction (p. 81).

These authors described the variations between students, with some posting frequently because they believe that this will give them higher marks, and others posting frequently because they thrive on the social aspect of the discussion. The danger is that those who enjoy the social engagement of the discussion board may clutter up the discussion with irrelevant and non-helpful chatter. As Brown et al. (2005) suggested, those who are termed “missing in action” or witness learners should not be seen as part of the same group of invisible students. One group is likely to be more successful than the other (as identified previously) and needs to be considered when the online tutor is communicating with the students. The teaching challenge is to, over a course of a teaching period, have the majority of students in the active learning quadrant regardless of where they started out. However, if teaching staff are not modelling the types of interaction that they are expecting from their students, the requests made by them to their students for interaction are unlikely to be successful (Beaudoin, 2002).

Although it is thought to be essential that a range of interactive opportunities be available and supported by both staff and students, it is also important to take other factors into account. If, as Salmon (2011) contended, online learning is a “transformation” that occurs in “leaps and bounds” (p. 31) and is an environment where students are required to develop skills in computer networking alongside their learning about the content, some knowledge of the development of skills is important. Salmon (2011) defined this process (Figure 2.1) as following a pattern that develops in five stages. This model has implications for both tutors and learners.

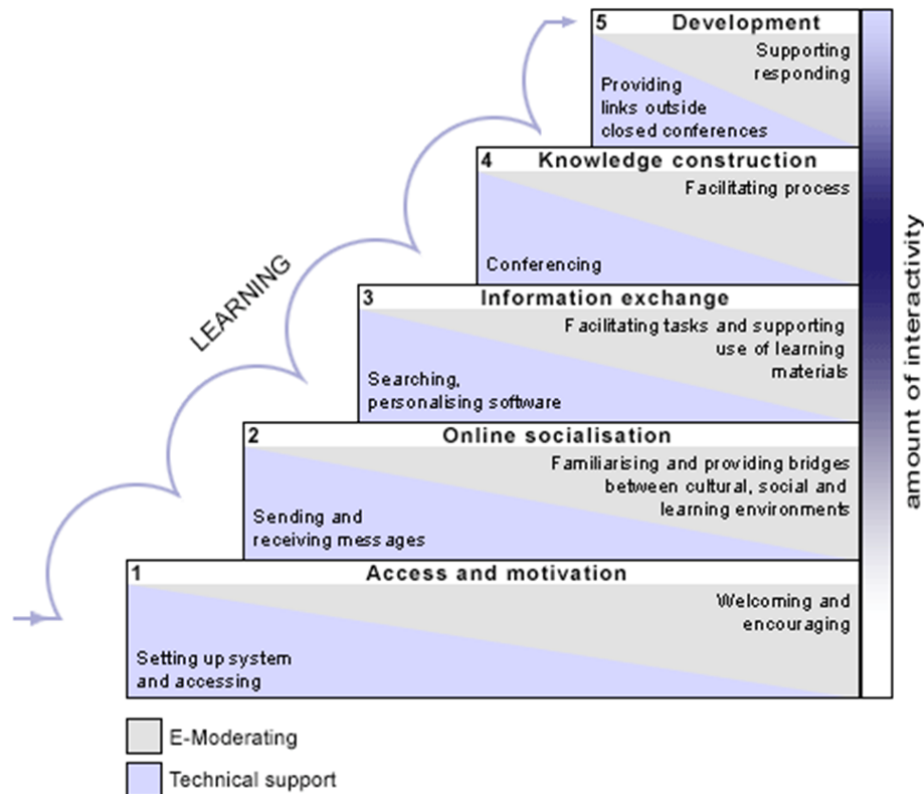


Figure 2.1. Model of Teaching and Learning (Salmon, 2011)

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The five stages of Salmon's model are briefly outlined as follows:

- **Stage one – (access and motivation)** – individual access and ability to use online materials are essential prerequisites.
- **Stage two – (online socialisation)** – online identities are established and relationships for interaction emerge.
- **Stage three – (information exchange)** – sharing of information and ideas and early stages of cooperation with others.
- **Stage four – (knowledge construction)** – high quality collaborative learning would be expected.
- **Stage five – (development)** – evidence of metacognition and reflection.

As noted in Salmon's model, each stage requires students to develop certain technical and collaborative skills and requires different support and scaffolding by

tutors. The intensity and the quality of interactive activity are also thought likely to develop through such stages.

Although Salmon's model has been identified as one that is easily understood and used by many tutors within higher education, it has been challenged as not necessarily being the panacea it appears (Moule, 2007). Moule expressed concern that the model was being used as a template for many who are designing online courses and that alternative models might be more suited to individual situations. She argued that the model has limitations in neglecting the full range of learning theories and that not all learning occurs as a result of participation within a community. To support her argument, Moule (2007) cited Lisewski and Joyce (2003), who expressed concern that the five-stage model takes little note of student learning style and that its rigidity limited opportunities for flexibility and reflexivity. Lisewski and Joyce (2003) warned that although models like Salmon's are useful in "informing and guiding learning and technology practice," online course designers and those responsible for staff training should be wary of them becoming "too dominant a discourse" (p. 56). When Jones and Peachey (2005) investigated five online courses, they reported that the Salmon model of E moderator training involves too much time on the initial two levels, and that this impacts on the available time for knowledge construction and the building of critical communities of practice. Laurillard (2002) has also argued that structure and staged timetabling can be problematic for students by reducing the flexibility options that are important for many students who choose an online degree. Educators who work online must ensure that their model provides the best student outcomes.

Pedagogical Challenges in the Development of Online Interactions

As outlined, online courses provide opportunities for the creation of learning environments that are characterised by participation and interactivity for both students and instructors (Brindley, Walti & Blaschke, 2009). These online communities of learning are often supported in their development by a range of rapidly developing technological web-based tools, with many tutors seeking more interesting ways to use technology in their teaching as a means not only to engage students but also to enable students to use and experience powerful cognitive strategies (Herrington & Kervin, 2007), with students seen as “intellectual partners” in this process (p. 1). However, it has been recognised that there is a challenge in ascertaining in what ways this technology supports the underlying processes that are common to all learning, to function effectively (Beetham & Sharpe, 2007) and raises concerns for educators who are worried about whether the instruction provided within these online communities is pedagogically sound.

In a study investigating the thoughts of staff around the use of Blackboard LMS as a useful online learning environment, Heirdsfield, Walker, Tambyah and Beutel (2011) identified that, although many students reported on it favourably in terms of having resources available and accessible for 24 hours each day, for many staff the view was less favourable: they considered that face-to-face interactions were more valuable. These results led the authors to suggest that staff needed training, support and encouragement to move towards innovative online learning where emphases on subject knowledge and pedagogy are not treated as mutually exclusive domains (Koehler & Henrikson, 2011). As Shulman (1986) argued, if tutors are to be successful, it is not sufficient to have subject matter and general pedagogical strategies. He believed that although both are necessary, they are not

sufficient for capturing the complex ways that tutors have to think about how to teach the content. He argued for pedagogical content knowledge, meaning that tutors have to confront both issues of content and pedagogy simultaneously.

As documented by Anderson and Dron (2011), any course whose students and tutors are not in the same place (as in my study) requires some form of technology to span the distance in support of teaching and in the provision of content. Increased opportunities for access to advanced web tools allow retrieval of vast volumes of educational content (Anderson, 2008) in multiple formats. Continuously developing and improving search engines allow previously unheard of access to a wealth of information. This allows extensive opportunities for tutors and students to create content by the sharing of these resources and examining them from a variety of perspectives through authentic collaboration (Lombardi, 2007). Additionally, such tools as video cameras and web streaming technologies allow teaching to continue to be personal and individual, in spite of being done from a distance.

Online social constructivist pedagogies operate by using technology to create opportunities for both synchronous and asynchronous interactions between students and tutors, with the discussion forum embedded within an LMS often a key feature used to foster interaction in the online environment. To achieve levels of interaction considered to support active, focused and progressive learning, threaded discussions are often used as a means of generating or promoting interaction (Edelstein & Edwards, 2002). Typically, discussion is initiated by a question posted by the instructor, and investigated by students as they interact with each other asynchronously (Bento et al., 2005). Although discussion forums are common, and have been identified as useful supports for learning through interactive opportunities

for engagement, a challenge for designers and instructors is in achieving a level of student participation that supports learning and allows students to play a central part in the learning process. The expectation is that, as Collison, Elbaum, Haavind, and Tinker (2000) noted:

As participants react to content, share challenges, teach each other, and learn tangibly by putting into words their own understandings and clarifications of assumptions, they experiment with and eventually take ownership of new skills and ideas. (p. 8)

The onus is then on the tutor to focus and deepen the dialogue without getting in the way of participants' "development of their own expertise" (Collison et al., 2000, p. 8) and, as identified earlier in this chapter, in ways that provide effective feedback to the learning outcomes. Feedback has been defined in several ways, with Sadler (1989) identifying it as information given to a student about the gap between actual performance and the performance goal.

For Ramsden (2003), assessment defines the curriculum for students and can be seen as a powerful driver (Boud, 2007). It lies at the heart of the learning experience, with the ways in which learners are assessed shaping their understanding and determining their ability to progress (HEFCE, 2010). Knowing that students tend to focus on what they need to do to successfully meet assessment requirements can give some insight into where students channel their energies (Cartney, 2010), and has promoted the concept of assessment *for* learning rather than assessment *of* learning. Although Hattie (1987) argued that high quality feedback is something that students want and value in enhancing their learning, others have noted that some students have difficulty in understanding and acting on feedback that (Crisp, 2007; Spinks, 1998), causing many tutors to question the value of the time spent in

developing feedback for their students. However, as Duncan (2007) argued, feedback is inseparable from the learning process, and is particularly crucial in the online learning environment, requiring a feed-forward process allowing students to appreciate the value of the comments for their learning throughout their degree, rather than seeing them in isolation. For this to be effective it is essential that feedback provides more than “vague praise” (Duncan, 2007, p. 273).

While instructor feedback is crucial, Nicol (2010) maintained that learners must develop their own skills of evaluation and judgement. Nicol asserted that students learn by the active construction of their own understanding of the feedback and deriving meaning from it. Students have to “decode” the feedback, “internalise” it and use that information to make judgements about the quality of their work (Nicol, 2010, p. 503). Nicol is an advocate for students providing feedback for one another, maintaining that “giving feedback is cognitively more demanding than receiving feedback” and that this should be used as a tool to accelerate learning (2010, p. 509).

Assessment is the procedure of observing learning with the purpose of improving the quality of that learning and should be used to determine current understanding and to improve subsequent learning. Nicol and MacFarlane-Dick (2006) identified seven principles of good feedback – that it:

1. facilitates the development of self-assessment (reflection) in learning;
2. encourages teacher (tutor) and peer dialogue around learning;
3. helps clarify what good performance is (goals, criteria, and expected standards);
4. provides opportunities to close the gap between current and desired performance;

5. delivers high quality information to students about their learning;
6. encourages positive motivational beliefs and self-esteem; and
7. provides information to teachers that can help shape the teaching (p. 3).

If regular and focused participation is considered to be integral in ensuring that students are keeping pace with the learner-centred activities and achieving the course outcomes, then as Edelstein and Edwards (2002) suggest, an objective appraisal of the effectiveness of participation in discussion forums can support student assessment as part of a summative evaluation of a student's knowledge, understanding and participation. As a guide for students in coming to an understanding of how effectively they are participating in the online discussion board, Edelstein and Edwards (2002) created a rubric that can provide students with feedback (Table 2.1).

Table 2.1

A Rubric for Assessing Effectiveness of Student Participation in Online Discussions

<i>Promptness and initiative</i>	Does not respond to most postings Rarely participates freely	Responds to most postings several days after initial discussion Limited initiative	Responds to most postings within a 24 hour period Requires occasional prompting to post	Consistently responds to postings in less than 24 hours Demonstrates good self-initiative
<i>Delivery and presentation</i>	Uses poor spelling and grammar	Several errors in spelling and grammar	Few grammatical or spelling errors	Consistently uses grammatically correct posts with accurate spelling
<i>Relevance</i>	Post topics which do not relate to content Makes short or irrelevant remarks	Occasionally posts off topic Most posts are short and offer little insight into the topic	Frequently posts are related to discussion content Prompts further discussion	Consistently posts topics related to discussion topic Cites additional references
<i>Expression</i>	Does not express opinions or ideas clearly No connection made to topic	Unclear connection to topic evidenced in minimal expression of opinions or ideas	Opinions and ideas are stated clearly with occasional lack of connection to topic	Expresses opinions and ideas in a clear and concise manner with obvious connection to topic
<i>Contribution to the learning community</i>	No effort to participate in learning community as it develops	Occasionally makes meaningful reflection on group's efforts Marginal effort to become involved with group	Frequently attempts to direct the discussion and to present relevant viewpoints for consideration by group	Aware of needs of community Frequently attempts to motivate the group discussion, presenting creative approaches to topic

Adapted from Edelstein and Edwards (2002)

In spite of the potential for strengthening and developing understanding through discussion and feedback to students, for some, the discussion board may not provide the best support for learning. Mishra and Juwah (2006) found that the online discussion forum is often not used to its full effectiveness and that not all students are comfortable in its use. The reasons given were cultural, linguistic or fear of inadequacy in language ability, or anxiety around a perceived lack of effective skills in technology. Students identified that they were self-conscious about academic language ability; intimidated by others' better grammar and syntax; nervous of the permanence of the online written word; and lack of typing speed affecting the ability to get one's thoughts composed. Feedback also identified that for some students, the posts on discussion boards were irrelevant and unwieldy due to their sheer volume, and caused students to lose sight of the essence of the discussion (Mishra & Juwah, 2006). The use of the discussion board also impacts on the amount of time spent by tutors online and creates additional responsibilities in managing online discussions, since gaps in knowledge cannot be readily identified if the discussion and exchanges are limited (Ellaway, Begg, Dewhurst & Macleod, 2006).

In a study investigating patterns of engagement and interaction among tutors and their language learning students, Pawan, Paulus, Yalcin and Chang (2003) identified that not all students participated, the posts were uneven and there was overall low instructor participation. They found that participants were primarily sharing their thoughts, exchanging information and brainstorming their own ideas, not building upon the ideas of others. McKenzie and Murphy's (2000) study investigating the effectiveness of online discussion found that only 65% of students posted, with the highest volumes of posts found in weeks one and two. Although 74% of the posts were identified as directly engaging with their peers, two thirds of

the posts were commentaries rather than responses to questions. The discussion forum was mainly used by a core group of students (24%) who contributed regularly. McKenzie and Murphy (2000) concluded that to be effective, online discussion groups need to provide evidence of their value. If the students are not motivated to visit the group, there is no way that the tutor can be “heard” or “seen” or have the ability to understand when help is required.

The pedagogical use of online discussions requires attention to their purpose and students’ understanding of their roles within the discussion. One key to online learning is the development of a mutually supportive learning environment where learners construct and express opinions, test ideas and request help as required, but this is not a process that can be left unmonitored. For learners to participate and gain positively from the experience, strategies need to be put in place to ensure that students are skilled in learning how to learn through information technology and be able to access, navigate and utilise what is on offer to develop meaningful learning (Juwah, 2006). The learning outcomes need to be clearly defined to allow students to take ownership of their learning, monitor their progress and evaluate their success. For Juwah (2006), effective learning is characterised by being active, meaningful, self-regulated and underpinned by reflection, and is impacted by the size of the learning group. Geer (2005) took this a step further, suggesting that the types of interactions that are encouraged to develop are dependent on group size and that different technologies are more suited than others in supporting those interactions. The following framework (Figure 2.2) identifies the stages in Geer’s model. In interpreting the framework, the width of the pyramid at any one level is proportional to the optimal size of the student group for that interactive pedagogy. The decreasing width of the levels represents a decrease in the size of the student group considered

ideal for the type of interactive pedagogy. The discussion group may be much larger where communication is merely social. Conversely, for Geer, groups should be smaller when collaboration is required.

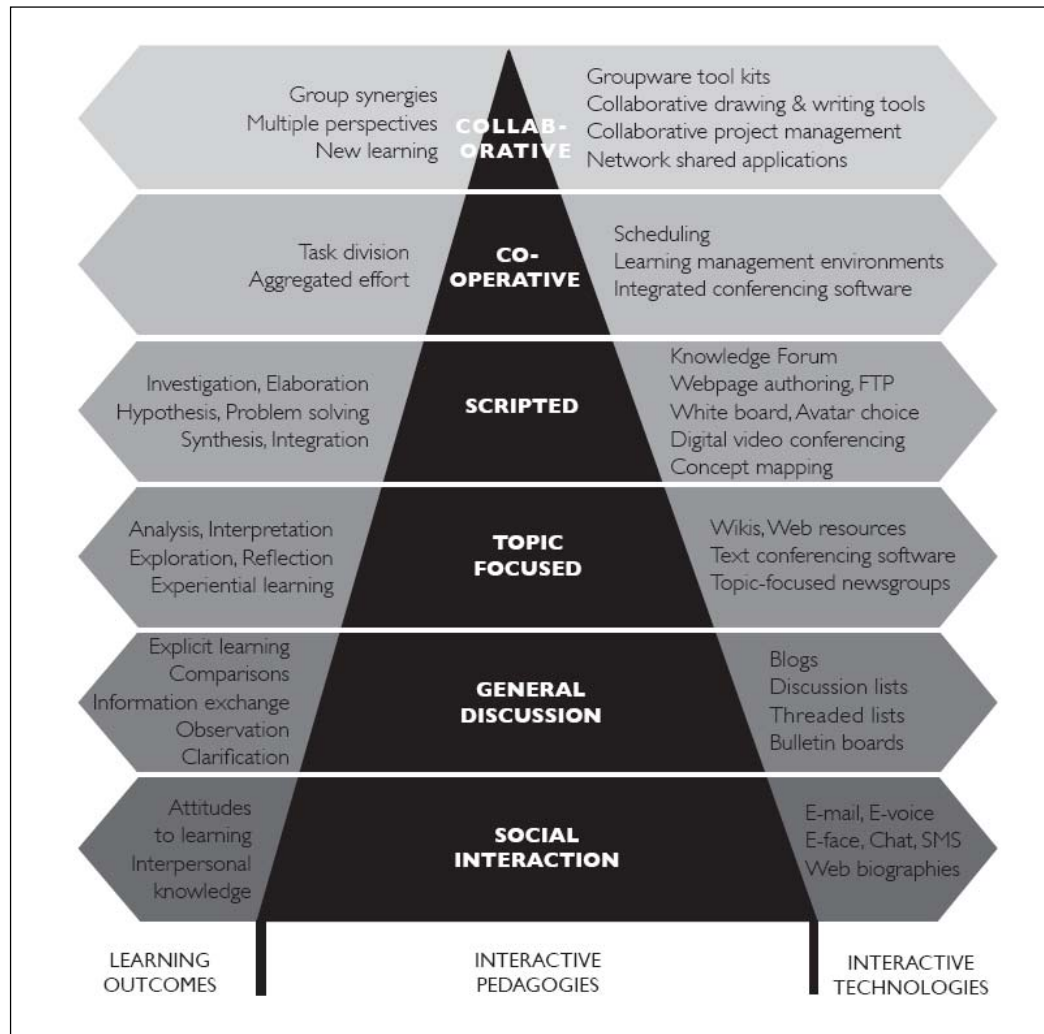


Figure 2.2. A Framework of Technology-Mediated Interaction for Education

(Geer, 2005)

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Cooperative or Collaborative Learning

University students are increasingly asked to work co-operatively and learn collaboratively (McWhaw, Schnackenberg, Sclater & Abrami, 2003). Both terms are regularly used when discussing online interaction and both are considered essential to effective learning. It is therefore important to understand the distinctions between the two terms. Within the literature the terms cooperation and collaboration are often used interchangeably, perhaps because they both favour small group activities with the goal of enhancing the participants' knowledge. Nevertheless, there are some important differences. Cooperation requires learners to work on an agreed common task, which may be divided into components that the learners will complete individually. Each person tends to be responsible for his or her own component, with a focus on the end product. In contrast, collaboration presents a more structured interdependence with participants working together to accomplish a specific goal (Panitz, 1997). In a collaborative learning environment, learners are not passive receivers of information. Rather, they are active in their acquisition of knowledge through discussion, seeking out information and exchanging opinions with their fellow students (Brindley et al., 2009). Collaboration has less emphasis on the end product and more on the actions or processes with all individuals having ownership.

Learners are encouraged to develop their own strategies for working together with an emphasis on the process of the interactions, where disagreements are overcome and clarifications emerge in ways that allow common understandings to develop and achievement of a common and explicit goal. Consensus is negotiated resulting in new meaning and co-construction of knowledge (Geer, 2005). However, despite evidence to support the benefits in learning and achievement, students are often apprehensive when asked to complete a collaborative assessment. They fear

that other team members will not pull their weight and often feel that they should be provided with the content knowledge that they need to know (Felder & Brent, 1996), particularly for those students who believe that the tutor is the source of knowledge (Hansen & Stephens, 2000). As the onus for knowledge construction, information researching and product creation is increasingly put upon the student, there is a need to ensure that students know how to work together and are given help and training in making their groups functional through a sense of community (Nipper, 1989; Oliver & Omari, 2008).

Sense of Community

As Wenger (2010) identified, a community of practice can be viewed as a social learning system that exhibits emergent structure, complex relationships, self-organisation, dynamic boundaries and ongoing negotiation. Other researchers have characterised communities in a range of ways often based on underlying social philosophies (Barab, 2003). McMillan and Chavis (1986) identified five relevant attributes of community: boundaries, emotional safety, sense of belonging and identification, personal investment and a common symbol system. Others have noted feelings of membership and belonging (Unger & Wandersman, 1985), part of a larger dependable and stable structure (Sarason, 1974), and a shared faith that members' needs will be met through their commitment to be together and have empowerment to have influence over what the group does (McMillan & Chavis, 1986).

Picciano (2002) defined this sense of being and belonging in an online course as social presence. Rourke, Anderson, Garrison and Archer, (2001) identified three areas of social presence in online discussion: affective responses that contain personal expressions of emotion, feelings and values; cohesive responses that build and sustain a sense of group commitment; and interactive responses that agree or

disagree, provide approval or reference to previous messages. Importantly, Swan and Shih (2005) found a significant relationship between perceived social presence and satisfaction with online discussions.

There is evidence that strong feelings of community increase the commitment to group goals, cooperation among members, satisfaction with group efforts and motivation to learn (Rovai, 2002), through a sense of identity, emotional connection and wellbeing that diminishes feelings of loneliness or isolation (Rovai & Wighting, 2005). When learners feel a sense of belonging and being acknowledged, they are more likely to feel connected with the need for belonging (one of the five basic human needs) (Glasser, 1986), with a sense of place identified as being essential for online students (Brooke & Oliver, 2003). When people feel that they are part of a strong community, they feel better adjusted and supported, feel connected to others and share common goals that may be above their individual aspirations (Fisher, Sonn & Bishop, 2002). It appears that many students have a need to feel that their individual contributions have value, can add positively to the discussion and ultimately support the learning not only individually, but also of the overall learning community. Significantly, although community members identify with the group, they must at least partially accept the group's goals and values (Rovai, 2002). However, to have their voices heard, there needs to be evidence of reciprocal interactional activity.

Chene and Sigouin (1997) defined reciprocal interactions as those that demonstrate and influence a mutual relationship that supports learning and development. These interactions can be evident between individuals or in a collaborative learning community through mutual engagement in a community of practice (Wenger, 1998). In a community of practice, knowledge, skills and

strategies are socially negotiated. New members are supported and mentored in ways that allow them to contribute and develop common goals within that learning community (Lave & Wenger, 1990). Glazer and Hannafin (2006) described this “collaborative apprenticeship model” (p. 181) as having four progressive development phases: introduction (where observation and participation occurs); development (where skills are acquired through scaffolding and support of others); proficiency (demonstrates understanding by being autonomous and able to design activities); and mastery (when able to promote and model strategies to others).

Reciprocal interactions are influenced by a range of variables. Peer perception, both collectively and individually, has an impact on engagement. Chene and Sigouin (1997) identified a supportive learning climate as being one where positive words were evident, where group members were accepted and where there was equality of participation. There should be opportunities for shared experiences and conditions to obtain support and to discuss ideas (Terehoff, 2002). Those members who are short of time or have limited access to resources are much less likely to demonstrate and learn through peer interaction. Additionally, over dependence on the “knowledge expert” can limit interactions (Glazer & Hannafin, 2006). Although initial reciprocal interactions may be triggered by lack of knowledge or skills and encourage the support of others, there is also a danger that lack of confidence may impact on interactions. If there is not a culture of acceptance and support, interactions may be limited to only a few individuals (Lortie, 2002).

The Role of the Online Tutor

The tutor has an important role to play in student learning. In recent years, individual differences among students have emerged as an important factor in designing learning materials and instructional methods. However, it is not only

students who are different but also the tutors who work with them. As Hargreaves and Fullan (1992) advised, “It is what teachers think, what teachers believe, and what teachers do at the level of the classroom that ultimately shapes the kind of learning that young people get” (p. ix).

Although these authors were referring to schoolteachers, the ideas can be applied to the adult learning environment and related to online teaching and learning at the university level, where the teaching role is an important one that demands attention and further exploration.

Regardless of the learning environment, the tutor influences the learners’ perceptions of the quality of their learning experience (Norton & Hathaway, 2008). As identified earlier in this chapter, the development of deep learning is a goal for most university tutors, and they understand that to develop this, students are required to be active in their learning. However, as highlighted by Potter (2013), if courses involve too large a workload for students and there are too many demands on their time, their only option is to adopt a surface approach to their learning. They disengage from the ideas that they are supposed to be learning, skim readings and present poor quality work, with the students who are the least capable or most inexperienced being hardest hit. It is crucial that first-year students are given time to “learn the rules of the game” (Potter, 2013, p. 6), and that their tutors are also supported in learning how to best support them.

Over a decade ago, in an analysis of academic teaching and learning in higher education, Laurillard (2002) suggested that there was a lack of professional training in this area, with the prevalent attitude being that academics require only expertise and knowledge of their particular discipline to teach their subject. A decade later training for staff was still an issue, with Palloff and Pratt (2011) advising that

within universities there is a “myth” around online education that asserts that “it is easy to teach online – all one needs to do is to move exactly what was being done in the face-to-face classroom into the online classroom” (p. 342). Anderson, Rourke, Garrison and Archer (2001) agreed that “teaching in online courses is an extremely complex and challenging function” (p. 3), suggesting that capturing a video or I-Lecture or posting a PowerPoint presentation into a Blackboard site is not online teaching. As noted by Laurillard (2007), teaching online is no longer a technical and administrative process that allows content to be delivered on to a computer. Making content easily available and accessible does not lead to learning any more than opening a library would lead to a literate local community. Content only becomes “alive” when integrated and related to meaningful learning and pedagogical processes (Ravenscroft & Cook, 2007). Learning activities need to be “pedagogically sound, learner-focused and accessible” (Laurillard, 2007, p. xv). Although many university lecturers use technology to support their teaching by the use of such tools as interactive whiteboards, making lectures available online and providing digital library access, none of this is particularly “transformational” (p. xv).

As Fanghanel (2007) noted, for many years university teaching was seen as being unproblematic, with experts in their field of knowledge passing on their expertise to future generations. However, with an increasingly diverse body of students participating in increasingly flexible and varied styles of tertiary learning environments, tertiary teaching has become more complex. Additionally it has become more “problematized” through educational development and targeted funding initiatives, and more “managed” through audits and “managerialist understandings” of teaching practices (Fanaghanel, 2007, p. 4). These contexts have

had an impact on the way tutors conceptualise and approach their teaching. However, it is common to find that tutors find it easier to follow accepted practices than to “carve out new paths” (Roberts, 2005, p. 5), preferring to use the methods employed when they were students themselves. Many tutors use a model born from that of their own tutors, consisting of tutor-centred strategies in a traditional on-campus environment (McQuiggan, 2007). Some of those tutors may demonstrate a model of teaching that involves communicating knowledge to groups of students who passively receive it (Price & Kirkwood, 2010). For those tutors who hold a belief that emphasises transmissive teaching, interactive technologies are unlikely to have an impact. It appears that although many tutors state that they believe in supporting student learning through problem-solving opportunities, in reality they demonstrate a teaching style that is more aligned with knowledge transmission (Norton, Richardson, Hartley, Newstead & Mayes, 2005). If these tutors believe that what they are doing is based on their beliefs and perceptions of what it is to teach effectively, but they are not gathering any evidence to demonstrate that what they are doing is successful, then they are unlikely to develop in their thinking and strategies (Kirkwood & Price, 2006).

Despite a lack of competency in teaching online courses, universities frequently demand the implementation of online instruction, with teaching staff rarely given the required professional training (Sims & Bovard, 2004). On many occasions, tutors are brought in at the last minute with little or no preparation. Even when training is provided, the focus is more likely to be on the technology rather than on the pedagogy (Palloff & Pratt, 2011). These authors also suggest that training goals are rarely made clear and that there is often little understanding or discussion around what tutors and students need to do to benefit from a quality

online teaching and learning experience. Although Palloff and Pratt argued that “good instructors and instruction are the strongest marketing tools an online program can have” (p. 366), with teaching staff being perhaps the single greatest resource of any university (Fish & Gill, 2009), it appears that for many universities, staff members are often left to develop their own expertise through conversations with colleagues or engagement with professional readings rather than being provided with professional training that builds capacity.

Within the literature, “professional development” and “professional learning” are used interchangeably. Professional development has been viewed recently as something done or provided for members of a teaching staff, with Fullan (2007) arguing that, as a strategy, it has run its course. As highlighted by Mayer and Lloyd (2011) these courses are often seen as being “one-shot” and “de-contextualised” (p. 3). In contrast, as Knapp (2003) identified, professional learning refers to changes in the thinking, knowledge, skills and approaches to instruction that inform teaching practice (cited in Mayer & Lloyd, 2011). For Scardamalia and Bereiter (2003), learning and knowledge-building practices should be considered together in the professional learning context where they provide strength to each other. Stoll and Louis (2007) contended that professional learning should be done collaboratively within a professional learning community where tutors interrogate their practice reflectively, collaboratively and developmentally. Similarly, for Reushle (2005) the process involves engagement in learning that is continuous, and supports the building of knowledge, skills and attitudes towards relevant practice and theory.

Tutors come to their roles with a range of beliefs and assumptions around the nature of teaching and learning that can have an impact on how any class operates, whether face-to-face or online (Yero, 2002). Although there has been an increase in

higher education research from the 1980s onwards (Fanghanel, 2007), much of that research has been focused on learning rather than teaching. As noted by Northcote (2009), the volume of research into university tutors' perceptions of the teaching context, approaches to teaching and quality of teaching outcomes has not been comparable to the wealth of information available around student learning. Because of these changes in pedagogical styles and options for student learning, it is important to reach an understanding of how these changes affect tutor beliefs and ultimately their pedagogy. According to recent literature and current educational theory, tutors' beliefs about education, learning and teaching are fundamental to the way they teach. Moreover, these beliefs affect the ways tutors interact with their students (Northcote, 2009), with tutors having to establish whether their familiar strategies will be effective in the development of learning or if a different approach should be adopted, particularly within a new and unfamiliar environment.

The changes brought about by online teaching and learning have created considerable new demands for educators (Mishra & Juwah, 2006). As stated previously, many tutors who are new to online teaching, without relevant background or experience of online pedagogy are often asked to contribute to the development and delivery of courses (Vlachopoulos, 2008). There is a real danger that these members of staff are being asked to run before they can walk without a clear picture of what the role looks like and whether it is very different from what they have previously experienced. Some identified differences between online and face to face teaching include a lack of visual clues (Conrad, 2004), and teaching and preparation being more labour intensive (Hinson & Laprairie, 2005) as all materials have to be available on the first day of the course, with this also impacting on the options for teaching spontaneity (Conceicao, 2006). VanLehn, Siler, Murray,

Yamauchi, and Baggett (2003) argued that learning opportunities are just that – opportunities to learn, and that not all students learn when provided with those opportunities, meaning that tutors need to have or develop strategies to support those online students as generally they have not learned to teach through the modelling of other online tutors (McQuiggan, 2007).

As previously noted, teaching in an online learning context involves a variety of skills and activities that are often non-existent in face-to-face classroom teaching, with the role being defined in a wide range of ways including tutor, teacher, facilitator, promoter, manager, discussion leader, negotiator, instructional designer, interaction facilitator and E-moderator (Morris, Xu & Finnigan, 2005; Salmon, 2011; Vlachopoulos, 2008). Whatever label is given, the role is a complex one and the challenges should not be underestimated. Berge (1995) identified four discrete categories within the online teaching role: *managerial* (provision of objectives, setting of timelines and defining of rules and roles); *technical* (ensuring all participants develop confidence in the network systems and software); *social* (where students are encouraged in a friendly, social environment with tutors affirming and recognising input and providing opportunities for group cohesiveness to develop); and *pedagogical* (where tutors provide insights from their subject knowledge and experience using questions and probes to encourage student responses). Berge contended that an effective tutor would be expected to manage the four roles concurrently.

Following this line of thinking, within Garrison et al's COI model (2000), teaching presence is described as being an important element of successful online learning. Their model focuses on effective strategies and models for interaction and collaboration, following the premise that effective instruction needs more than basic

interaction. This model of critical thinking and inquiry utilises three essential elements (social presence, teaching presence and cognitive presence) that support a successful higher education experience. The authors suggested that learning occurs through the interaction of these three prerequisite elements and that, although well designed learning materials are essential; they are not sufficient on their own. Additional human interactions are also required to support the learning. As Anderson et al. (2001) noted: “The extent to which participants in a community of inquiry are able to construct meaning through sustained communication and reflection and discourse will determine the level of higher-order thinking and learning that develops” (p.89).

The three elements of the model can be viewed as complementary to one another in supporting the online educational experience, as outlined in Figure 2.3.

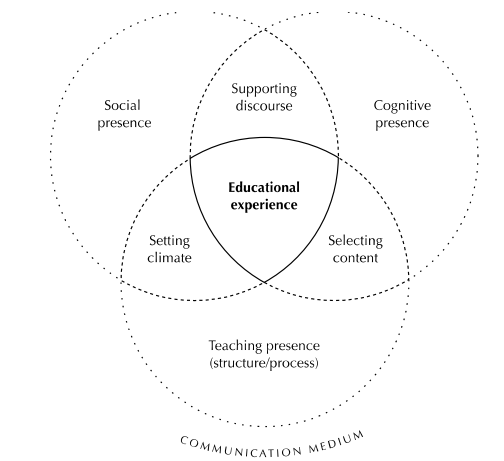


Figure 2.3. Community of Inquiry Model
(Garrison et al., 2000)

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The three presences outlined in the model are considered to support the educational experience, and each has a role to play in selecting the content, setting

the climate and supporting the discourse.

Social presence is defined as the ability of participants in a COI to project themselves socially and emotionally as real people in a textual environment that has few visual or contextual clues (Stacey, 2002). The more that is known about other members of the community, the more trustful and responsive those members are likely to become (Garrison, 2009).

Cognitive presence is defined as “the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse in a critical community of inquiry” (Garrison et al., 2000). It is essentially a process of critical thinking in an intellectual environment that supports sustained critical discourse and higher order knowledge application.

Garrison et al. (2000) hypothesised that high levels of social presence along with high levels of learner commitment and participation are essential prerequisites for the development of higher order thinking. Cognitive presence is sustained when significant social presence has been already established (Garrison, 1997a). When social presence is combined with teaching presence this can lead to high levels of cognitive presence that leads to deep and meaningful learning (Xin & Feenberg, 2006). Garrison et al. (2000) also argued that teaching presence is the glue that holds their model together to sustain learning.

Teaching presence is divisible into three categories – *instructional design*, *facilitating discourse*, and *direct instruction*. There are definite similarities between Berge’s work and the role of teaching presence within the COI model. Both of these works follow on from earlier work done by Feenberg (1999), and each significant viewpoint complements and supports the other.

Several researchers (see for example, Garrison, 1997b; Johnson & Johnson,

1996; Rice, 1993) have asserted that, within online learning communities, for cognitive engagement to be sustained, social presence must be established first. Johnson and Johnson (1996) considered interpersonal relationships to be at the “heart of communities of practice” where learning communities are based “as much on relationships as they are on intellectual discourse” (p. 1024). As identified earlier in this chapter, if students become acquainted and familiar with one another, experience trust and feel comfortable, then cooperation, sharing and negotiation of information is more likely. However, it is not sufficient to have time for socialising only at the start of the course. Learners should be encouraged and motivated to maintain their social interactions and relationships throughout the study time (Geer, 2005). However, it should be noted that the research literature advises caution in this area.

In the development of higher-order learning, more is required than social engagement. While social interaction is a necessary foundation for the relationships that are needed to foster deep and meaningful learning through the sharing and challenging of the interactions, there is a danger that students do not move beyond the sharing of personal experiences and miss the opportunity to develop skills in critical discourse. Garrison et al. (2000) claimed that many students are reluctant to move out of their comfort zone where they can continue to explore without ever having to advance to critical thinking and cognitive development. When Pawan et al. (2003) investigated the development of critical discourse within an online learning environment; they found that approaches to learning were strongly influenced by both the design of the course and the tutor’s activity. It appears that interaction by itself is not sufficient to encourage a deep learning approach. It follows that teaching presence is a necessary prerequisite, and a strong tutor visibility increases interaction

(Stein & Wanstreet, 2003) and supports deep learning (Rovai & Barnum, 2003).

Teaching presence is defined as “the design, facilitation and direction of cognitive and social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes” (Anderson et al., 2001, p. 5). Tutors need to provide clear expectations, critical discourse and diagnosis of misconceptions. Garrison et al. (2000) identified teaching presence as being essential in the development of learning communities, with the social aspects of learning being fundamental prerequisites to the process. Anderson et al. (2001) argued that “it is the tutor’s responsibility to precipitate and facilitate learning that has purpose and is focused on essential concepts and worthwhile goals” and “necessitates sustained and authentic communication between and among teachers (tutors) and students” (p. 3). Nevertheless, it is important to consider how communication occurs online, and what tutor expectations are around the outcomes of those online conversations. Conversation is used to express opinion, persuade others, motivate peers, share information, construct intellectual materials and to learn (Klemm, 2005). Written conversations create opportunities for discussion that can identify and store who has said what, when and in what particular context. Jenlink and Carr (1996) have summarised the essence of such a conversation theory, identifying four categories: *Monologue* (where there is exchange of opinion and supposition); *Dialogue* (where there is a community building form of shared viewpoints and the group is encouraged to achieve consensus); *Dialectic* (where the conversation focuses on analytic thought and factual information - aiming to distil truth or correctness from logical argument. Dialectic conversations commonly occur in an on-campus class where Socratic methods of asking and answering questions are used); and *Construction* (where the conversation creates something new such as an analysis,

report or recommendation). Klemm (2005) concluded that of the four categories, dialectic and construction forms are the most educationally valuable. Monologue is a “relatively degenerate” (p. 176) conversation with one person making statements. Although Klemm claimed dialogue is better than monologue, he also suggested that it is “unfocused, limited to opinion sharing, and not linked to achievement or a deliverable” (p. 176).

Although there has been much discussion around whether the online tutor role should take the prominent stance that involves being a “sage on the stage” rather than the constructivist style of a “guide on the side”, or even the ultra-low profile of a “ghost in the wings” (Mazzolini & Maddison, 2003), Anderson et al. (2001) argued that the cognitive apprenticeship model (Collins & Brown, 1991), the apprenticeship in thinking model (Rogoff, 1995) and the scaffolding strategies suggested by Vygotsky (1985) illustrate that the role of the tutor should be to provide support as an expert or a more skilled peer who supports a novice’s learning (Anderson et al., 2001, p. 8).

Validating this argument, Pawan et al.’s study (2003) found that within courses offering little involvement from the tutors there was little evidence of the development of deep and meaningful student learning. Additionally, within courses involving considerable interaction between tutor and students, the interactions were not considered as useful critical discourse, as little development in meaningful learning was demonstrated. It was felt that meaningful approaches to learning were best developed and demonstrated through focused critical discourse, with the tutor having an important role in moving the conversations from social to cognitive engagement. Pawan et al. (2003) found that many students remain at the level of what is termed simple brainstorming and never move on to integration of their

learning. According to Pawan and her colleagues, without explicit guidance, students are likely to engage in “serial monologues” (p. 119) that are one-way interactions, where there is little connection made to others’ contributions. They consider that tutor involvement through “overt facilitation” (p. 136) is essential in correcting misunderstandings and in asking probing questions that ensure continuing and continuous development of learning that is of a high quality and level of inquiry. The development of a community of inquiry needs clear direction and should be sustained throughout a course (Garrison & Cleveland-Innes, 2005).

It is suggested that to support this COI within an online environment, a range of interactive processes must occur. Figure 2.4 presents a model of interaction in distance education.

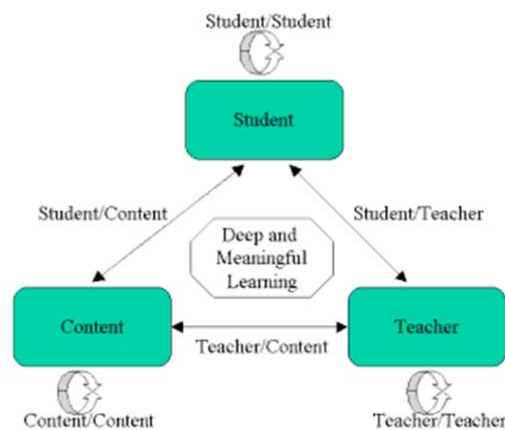


Figure 2.4. Modes of interaction in distance education.

(Anderson & Garrison, 1995). Reprinted with permission of authors.

As outlined in the model, interaction that results in meaningful learning requires engagement with and across content, students and tutors.

Tutors have influence in shaping the learning environment and carry responsibility for creating the conditions that encourage a deep approach to learning.

Considerable well-regarded literature supports a relationship between teaching presence and perceived learning (e.g., Pawan et al., 2003; Picciano, 2002; Shea, Pickett & Pelz, 2004) and as discussed throughout this chapter, student engagement in discussion is generally a highly valued aspect within this relationship. However, it is clear that unless discussions are structured properly, the online conversations can lead to little consolidation of an issue. If the online discussion is simply a forum in which students share experiences without taking any account of others' opinions, then the purpose of the interaction becomes more of a "read what everyone else says, but write what you think" exercise (Wood, 2002, p. 154) rather than a genuine opportunity to share, develop and consolidate ideas.

Garrison and Cleveland-Innes (2005) argued that interaction is not equivalent to critical discourse or sufficient for sustaining a COI. The emphasis should shift from assimilating information to constructing meaning and confirming understanding. For critical thinking to be developed, the conditions must allow the discourse to challenge accepted beliefs (Garrison & Kanuka, 2004). Additionally, critical thinkers have the ability to take control of their thought processes and gain a metacognitive understanding of them. For students to achieve high levels of critical thinking that supports the construction of new ideas and knowledge, there is a need for the interactions to be "structured and cohesive" (Garrison & Cleveland-Innes, 2005, p. 5) with the leadership role of the tutor being a powerful one. There is a risk that without adequate teaching presence and support, interaction will be mostly an exchange of personal experiences that make no connections to others' contributions (Pawan et al., 2003) or show much evidence of well-supported reasoning (Angeli, Valanides & Bonk, 2003).

Community of Inquiry Framework

The COI framework provides a mental schema (Anderson, 2004) for thinking about learning and teaching within online environments, and as identified earlier in this chapter, contains three elements – social, teaching and cognitive presence – along with categories and indicators to define each presence and to guide the coding of transcripts.

This thesis uses the teaching presence concept of this COI model, and as such it needs to be explored in further detail. As Garrison (2011), reminded us, with the expanded choices and opportunities that online learning offers, many courses have focused on collaborative inquiry-based study that is learning centred as opposed to learner centred. During the learner-centred approach there is a risk that the tutor is marginalised, whereas education should be seen as a unified process with tutors and students having complementary responsibilities for the learning. An effective teaching presence allows for the development of an appropriate transactional balance, and tutors, along with their learners, manage and monitor the achievement of worthwhile effective outcomes (Garrison, 2011). There is a need to understand and appreciate the integrating elements of teaching presence that facilitate higher-order learning outcomes within the online learning context. The three integrated elements are expanded upon as follows.

Instructional design and organisation.

Design and organisation is concerned with macro-level structure and process, and the role varies from that of a tutor working with materials and instructional design that have been prepared by another academic to that of a “lone ranger,” with tutors having total responsibility for the creation of content and learning activities (Anderson, 2004, p. 276). For those working in the latter category, in the initial

stages of development of a course, the task can be more demanding than for a similar on-campus class. There is a need for a different approach to teaching and learning that allows for the online learning capabilities to be fully utilised. The building of an online curriculum is complex in that it is a balancing act involving both increasing and decreasing of content. On the increasing side, there are more links provided leading to other sites that contain supplementary materials, and on the decreasing side, if there is an expectation for a variety of online interaction, there is a need to reduce the quantity of presented online material to avoid student overload and potential withdrawal. Table 2.2 outlines the design and organisation indicators and provides the exemplars suggested by Garrison (2011).

Table 2.2

Instructional Design and Organisation Indicators

Indicators	Examples
Setting curriculum	This week we will be discussing...
Designing methods	I am going to divide you into groups and you will debate...
Establishing time parameters	Please post a message by Friday...
Utilising the medium effectively	Try to address issues that others have raised when you post
Establishing netiquette	Keep your messages short
Making macro-level comments about course content	This discussion is intended to give you a broad set of tools/skills which you will be able to use in deciding when and how to use different research techniques

Facilitating reflection and discourse

The second element, facilitating reflection and discourse for the purpose of building understanding, is at the heart of this concept of the e-learning experience. This element represents the fusion of purpose, process and outcome and is where interest, engagement and learning converge. Whether teaching on campus or online, the managing and monitoring of student discussion is an important aspect of the role that requires effort to maintain student focus to achieve productive outcomes. However, it also requires somewhat of a balancing act, where too much teaching

involvement could affect the process and development of understanding. Guidance is needed to encourage involvement from less responsive students while curtailing those who could dominate the discussion if left un-moderated. Additionally, the process is not to encourage responses per se. Rather, it is to encourage relevant and appropriate responses and to encourage links to other postings. If students are to feel that the discussion is moving forward in a purposeful direction then all the threads of the discussion need to be brought together and shared understanding made explicit. As Garrison advised,

The teacher must negotiate something more than a rambling conversation yet not just a prescriptive dissemination of information. When students begin to take responsibility to construct collaboratively and confirm understanding, the teacher has found the appropriate balance of control (Garrison, 2011, p. 54).

Table 2.3 outlines the facilitating discourse indicators and provides the exemplars suggested by Garrison.

Table 2.3
Facilitating Reflection and Discourse Indicators

Indicators	Examples
Identifying areas of agreement/disagreement	Joe, Mary has provided a compelling counter-example to your hypothesis. Would you care to respond?
Seeking to reach consensus/understanding	I think Joe and Mary are saying essentially the same thing
Encouraging, acknowledging or reinforcing student contributions	Thank you for your insightful comments
Setting climate for learning	Don't feel self-conscious about 'thinking out loud' on the forum. This is a place to try out ideas after all
Drawing in participants, prompting discussion	Any thoughts on this issue? Anyone care to comment?
Assess the efficacy of the process	I think we are getting a little off track here

(Garrison, 2011)

According to Garrison (2011), tutors should consider the cognitive development within a positive learning environment, with content, cognition and context being integral parts of the whole experience.

Direct instruction

Direct instruction is most often associated with specific content issues, such as identifying misconceptions that have occurred. It identifies a role that goes beyond that of facilitation. As Garrison (2011) noted, this aspect of the teaching role within an online environment can be downgraded and therefore often not seen as an important aspect of the teaching role. But as he argues, there is a risk that if the disciplinary expertise that shapes the learning experience is missing or minimal, then the quality of the intellectual climate or direction may be lost and the opportunities minimised for the development of learning that is of a higher order. Table 2.4 identifies the indicators for direct instruction and provides the exemplars suggested by Garrison.

Table 2.4
Direct Instruction Indicators

Indicators	Examples
Present content/questions	Bates says...what do you think?
Focus the discussion on specific issues	I think that's a dead end. I would ask you to consider...
Summarise the discussion	The original question was...Joe said...Mary said...we concluded that...We still haven't addressed...
Confirm understanding through assessment and explanatory feedback	You're close, but you didn't account for...this is important because...
Diagnose misconceptions	Remember, Bates is speaking from an administrative perspective, so be careful when you say...
Inject knowledge from diverse sources, e.g. textbook, articles, Internet, personal experiences (includes pointers to resources)	I was at a conference with Bates once, and he said...You can find the proceedings from the conference at http://www...
Responding to technical concerns	If you want to include a hyperlink in your message, you have to...

(Garrison, 2011)

Teaching presence is not an effective process unless the tutor has the expertise to identify ideas and concepts that are necessary for the building of knowledge that encourages the achievement of high quality learning experiences. Throughout the three elements – effective instructional design and organisation, facilitation and reflection, and direct instruction – there needs to be provision of the conceptual order, organisation of the learning activities and guidance through the conversations, whilst at the same time the tutor must provide additional sources of information, diagnose misunderstandings and interject when required.

Garrison (2011) noted that, in spite of the importance of teaching presence in the learning process, it is the least studied presence. My study is therefore both timely and useful. I adopted the categories identified in Tables 2.2, 2.3 and 2.4 to analyse the interactions of tutors with their students within a Bachelor of Education pre-service teaching course.

Overview

This review of the literature identified several important concepts that influenced the direction of my study.

Online learning was identified as a growth area in many countries, as it is a means of meeting the needs of a new breed of students who seek flexible options for their study. As researchers such as Laurillard (2002) have suggested, these educational institutions need to move from a transmissive model of teaching, in which the tutor is seen as the expert passing on the knowledge, to meet the new demands of their socially connected students through taking advantage of everything that technology has to offer, with an emphasis on the social nature of learning where students construct their knowledge through interactions with others.

Research around *constructivist learning* theories has identified knowledge as

being constructed by learners rather than something that is passed over from the tutor to the student, who in this model is seen as an active participant in the process though collaborative engagement with others (see for example, Anderson & Dron, 2011; Barab & Duffy, 2012; Biggs & Moore, 1993; Coates, 2006). It was highlighted that the primary focus should be on the activities designed to support effective learning, rather than on the technology designed to support the activities (Beetham, 2007), with an essential element being the provision of appropriate feedback by teaching staff who have the content knowledge and pedagogical expertise to do this effectively (Anderson & Dron, 2011; Jonassen, 1991; Race, Brown & Smith, 2005) in ways that encourage students to achieve learning that is meaningful.

Meaningful learning was identified as meaning different things to different students (Cleveland-Innes & Emes, 2005), and includes surface learners, achievement learners and deep learners, with the context having an impact on the choices that students make. For students to achieve learning that is meaningful they need guidance and practice in the development of critical thinking that involves analysis, evaluation and synthesis of facts and opinions (Carmichael & Farrell, 2012) through participation in learning activities where they are encouraged to become reflective, self-critical learners (Oliver et al., 2007; Jones, 2013) through collaborative, authentic interactions with others (Herrington & Kervin, 2007; Lombardi, 2007), with the tutor supporting the development (Pawan et al., 2003).

Interaction was identified as being a critical element that underpins online pedagogy (Juwah, 2006) and is defined in a range of ways (see for examples Garrison, 1993; Gilbert & Moore, 1998; Roblyer & Ekhaml, 2000; Wenger, 1997). However it was also identified that little evaluative data has clearly demonstrated

how much learning occurs through interactive processes, with some students appearing to be successful in their academic outcomes in spite of minimal evidence of online interaction (Beaudoin, 2002; Bento et al., 2005; Taylor, 2002); this highlights a concern around the pedagogy of online learning.

Pedagogical implications of online technology emerged as an area of importance in the literature, specifically highlighting the challenges associated with asynchronous interactions that occur within threaded discussion boards within an LMS, where the responsibility sits with the instructor to focus and deepen the online dialogue (Collinson et al., 2000) by providing effective feedback that drives, supports and develops the learning (Boud, 2007; Cartney, 2010; Duncan, 2007; Nicol, 2010; Ramsden, 2003). However, although stressing the importance of strong guidance and support by tutors active in their own professional learning (Scardamalia & Bereiter, 2003), it was also identified that students had to be taught *how* to participate effectively (Edelstein & Edwards, 2002; Nicol, 2010), and to develop a real understanding of the value and the purpose of their online collaborative role as a crucial part of their learning within an online community (Nipper, 1989; Oliver & Omari, 2009).

This *development of community* emerged as a key aspect of effective online learning, with students needing to feel that they are team members and have a sense of belonging (Barab, 2003; MacMillan & Chavis, 1986). A strong sense of community supports the concepts of commitment, cooperation, motivation and wellbeing (Brooke & Oliver, 2003; Rovai, 2002; Rovai & Wighting, 2005), and students who feel a sense of connectedness and psychological closeness rather than isolation are thought to be better prepared to become actively involved with online learning and as a result develop higher-order thinking and an ability to build

knowledge (Baker, 2010). This development of community was identified as progressing through four stages of collaborative apprenticeship (Glazer & Hannafin, 2006), from observation to scaffolding to autonomy and finally to mastery, with the online tutor having an important role in ensuring that the community is nurtured and developed.

The online teaching role was recognised as being significant in supporting first-year students, as in this study, to learn the rules of the game of university learning (Potter, 2013) and one that demands expertise in a range of roles. However, many tutors are coming to the role ill-prepared for the important task at hand (Laurillard, 2007), with little professional training offered (Vlachopoulos, 2008), with the expectation that the on-campus content is readily transferred to an online context (Palloff & Pratt, 2011). Although interactions between participants were acknowledged as being a necessary component of online learning environments, interactions by themselves were considered to be insufficient in ensuring effective online learning, with cognitive engagement and critical discourse by students identified as needing an emphasis (Garrison et al., 2000; Garrison & Cleveland-Innes, 2005). This element of critical thinking was identified as a crucial aspect that was often missing from this very relevant discussion (Pawan et al., 2003; Wood, 2002).

Conceptual Framework

Particularly because the world in which we live and study has such diversity of ability, age groups and educational backgrounds, and because academic culture and demands can be novel and challenging, the types of interactions need clear, defined guidelines that focus students along a specified direction (Garrison & Cleveland-Innes, 2005). This guidance requires a strong teaching presence. If online

learning is to be seen as pedagogically sound and learner focused (Laurillard, 2007) it needs to be supported by tutors who believe that they have the skills to teach effectively and who reflect on their teaching in ways that ensure that they do (Kirkwood & Price, 2006). If as Anderson et al. (2001) argued, teaching in online courses is an extremely complex and challenging role, and as noted by Northcote (2009), since the volume of research into university tutors' perceptions of the teaching context, approaches to teaching and the quality of teaching outcomes has not been comparable to the wealth of information available around student learning, mine will be an important study. Figure 2.5 presents the conceptual framework I developed to guide the research approach.

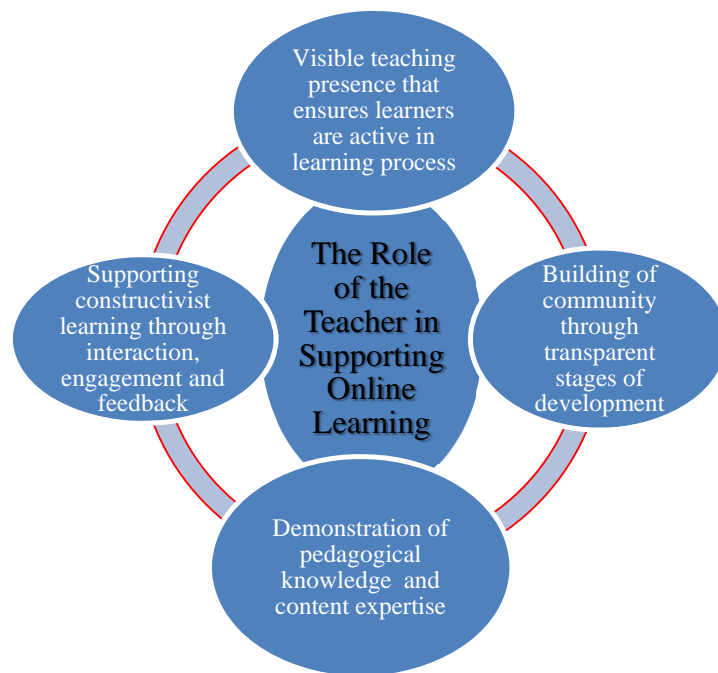


Figure 2.5. Conceptual framework – prerequisites for effective online teaching

As I identified in this chapter, interactivity and the interactions between tutors and their students are key success factors for effective student outcomes

within online learning environments. However, online interaction is a complex phenomenon that involves communication between participants supported by technology. Although many online courses offer discussion board activities as a support to student learning, for a variety of reasons not all students take advantage of these opportunities. Students need to be guided and supported through their discussions to achieve the best outcomes, with the role of the online tutor being an important one that requires skill and training in implementation.

Despite an emerging body of literature, many aspects of online tutor education remain unexplored. In particular, there is little literature on the beliefs and experiences of online tutors who prepare pre-service teachers through online modes of education. The experiences of tutors who teach teachers are clearly an important area for investigation. As part of the growth of online learning, pre-service teacher preparation programs are being redeveloped and implemented. However, since these program offerings to students are in their infancy, there are few models to follow and little direction available for teaching staff. To the best of my knowledge, my research is the first to investigate a first year, undergraduate, fully online teaching degree within Australia.

As more and more courses become open to an online learning cohort, it is essential that the students within the courses have the support of experienced educators who have the ability to develop the skills that are required to teach children. Tutors must be given ongoing support and professional development opportunities that support their online teaching, the nature and quality of tutor engagement in online environments must be the subject of more research. Therefore, I specifically set out to examine whether the tutors who were teaching within one particular online university unit demonstrated the full range of the elements of

teaching presence within an online discussion board. Using the COI framework (Garrison, Anderson & Archer, 2000), I investigated the role that online tutors play in supporting student learning in a pre-service teaching degree and used the conceptual framework developed from the literature to guide the research.

Summary of Chapter

In this chapter I presented a review of selected literature related to this study, and outlined the COI framework used as a lens to view online conversations between tutors and their students. I described the conceptual framework I developed to guide the study and discussed the relevant issues, allowing insights into the key elements of the research. In the following chapter, Chapter Three, I describe the methodology used to answer the overarching question:

How do online tutors demonstrate and account for their levels of teaching presence?

CHAPTER THREE

Research Methodology

The previous chapter contains my review of the literature and my conceptual framework. In this chapter, Chapter Three, I describe the methodological approaches used within the study, including the research setting, participants, research design, data collection, data analysis and ethical considerations.

Study Focus

The concept of teacher presence – or more specifically teaching presence – in an online asynchronous learning environment was the focus of attention in this research. Tutors working in a traditional face-to-face classroom are perceived as being present even although they may be silent. However, if tutors of an online classroom are silent they are invisible to their students and almost certainly not seen to be teaching. But how often do tutors believe that they need to be “seen” by their students to be considered present, how often are they actually present and what do they see as their role in that presence? The principal aim of this research was to understand the teaching presence issues that are experienced by educators who teach in an online environment.

I investigated the volume and types of teaching presence oriented collaborative conversations that occurred between teaching staff and their students in online discussion forums and ascertained how teaching staff account for these. The overarching research question that I set out to answer was:

How do online tutors demonstrate and account for their levels of teaching presence?

I used an explanatory mixed methods design, with the purpose of collecting quantitative (in the form of descriptive statistics) and qualitative information (using

interview data) sequentially in two phases. I used a case study approach to present the data that emerged about the beliefs that tutors held and demonstrated around the complexities and nuances of online teaching. The specific research questions on which my study was structured were:

1. *What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?*
2. *What proportion of the online discussion is characterised by teaching presence examples of discourse facilitation?*
3. *What proportion of the online discussion is characterised by teaching presence examples of direct instruction?*
4. *Which teaching presence components do tutors believe are important in supporting learning?*
5. *Which factors impact on tutors' ability to provide a visible online teaching presence?*

Finally, based on the results of my analysis, I developed a framework to address the final question:

6. *What pedagogical strategies can be implemented to enhance collaborative learning in online education programs?*

The Context

An undergraduate teacher education course (Bachelor of Education, Primary) within the School of Education at a Western Australian University was selected. This course consisted of 32 units that included three practicum placements (each of 15 days duration) and one 10-week final internship placement. Apart from these placements, all of the units were completed fully online. There was no requirement to attend classes or to visit any university campus. The unit selected for this study

was a first-year unit – an educational psychology unit in which the focus was on children’s development and how that development is linked to learning.

In the year of the data collection for this study (2011), this first-year unit had 19 tutors and over 2000 enrolled students. The students were divided alphabetically into 28 groups with approximately 75 students in each. The four tutors who took part in the main component of this research each taught one group of 75 students. All participated over one teaching period, known as a study period, of twelve weeks (June – August 2011) in an online unit of study that was a compulsory core unit for their Bachelor of Education (Primary) course.

The educational psychology unit was selected as it was one of the first subjects that most students chose to complete in their teaching degree. This meant that these students were unlikely to have been influenced by a variety of online teaching styles, neither were they likely to be experienced learners within an online environment.

The four tutors (three women and one man) were selected as participants in the research because they provided variation in age, gender, school teaching experience, tertiary teaching experience and online teaching experience, allowing for a broad spectrum of beliefs and practices to be examined. Their ages spanned from twenties to seventies, and their teaching experience ranged from five to 30 years.

This first-year unit was delivered using a fully online approach, with students accessing materials and participating in activities based within a large-scale commercial software-based LMS, Blackboard. This LMS provided users with a platform for communication and content sharing. In each online unit, students were provided with a “unit information” page that contained information regarding the unit – a unit outline that detailed the learning objectives, modules and topics,

essential and recommended resources, and assessments; details about the tutorial groups; the different communication and learning options available within that unit (for example, tutorial groups, study groups, email contacts, and descriptions of other technologies that would be used), and links to further useful resources (such as the library, referencing information and university support for study skills such as research and writing).

Communication occurred via announcements posted by teaching staff, and through discussion boards where students and tutors could create discussion threads and reply to ones already created. Responses could also be made through email, although this was the least preferred method of communication due to the official belief that the collaborative, online discussion was the best method to support student learning. All course content was provided by teaching staff in the form of research articles, recorded lectures, portions of previous assignments, video clips and so on. There was also a compulsory textbook for the unit. This content was available for students from the first day of the study period, as were the weekly activities. As outlined above, for this unit, the main form of communication between the individual tutors and their students was within a threaded discussion model, where users had the option of responding to one another directly, but asynchronously.

There was a general discussion topic each week and although students were encouraged to participate within these discussion forums, this participation was neither mandatory nor assessed. Each of the tutors and their teaching group of 75 students had individual discussion boards and forums, with the 12 weekly topics being identical for each of the four groups. This setting gave me the opportunity to explore four cases of interactive practices within an online teaching degree, allowing the comparison of four groups using identical materials and activities to support the

teaching and learning.

I collected data using online, asynchronous, threaded discussion groups to explore the first three of the research questions using online discussion boards within Blackboard. In selecting suitable online topic-focused discussions to investigate for this study, I considered the influence of several variables on the outcomes of the investigation. Student characteristics can affect the group dynamics. Many of these characteristics cannot be controlled, but some such as age, year of study and experience may provide some explanations for messaging behaviour. Tutor characteristics were also important to consider in the choice of suitable discussion board conversations. I expected that tutor beliefs, their prior experience, time commitments and online expertise would be important factors and were part of the focus of the study.

Philosophical Approach

Following Denzin and Lincoln's (2011) suggestions for the selection of a research design, a researcher should first locate the field of inquiry in terms of either a qualitative or a quantitative approach, and as indicated by Cresswell (1994), the research questions should determine the direction for the research and properly dictate the method of data collection.

For this study, the design was influenced initially by the overarching objective around the online presence of tutors within their teaching environments and how those tutors accounted for the types of interactive presences that they provided for their students. I employed a mixed methods approach to examine and evaluate the teaching presence approaches of four tutors in an asynchronous online learning environment. I particularly focused on the discussion board for one unit of an online undergraduate teaching degree. Topic-focused discussion threads were

considered to be an integral aspect of student learning within this unit.

Because the research questions called for evidence that could not be collected from a single method – since they covered beliefs, values, feelings and reflections, along with the measurement of the frequencies and types of online postings – I used both qualitative and quantitative data collection and related analysis methods. I employed inductive analysis to capture details of participant experiences, taking a holistic perspective so that I could explore the phenomena and complexities of online teaching in a rich dataset.

The major characteristic of a mixed methods research approach is that a study includes both quantitative and qualitative data collection. Inherent in such an approach are decisions about the timing for data collection – whether the phases should be conducted concurrently or sequentially. It was also essential to consider the weighting: would the quantitative or qualitative data be given priority or would they be accorded equal priority? It then had to be established how the quantitative and qualitative data would be integrated to form inferences. In this design, the quantitative data was collected first and the qualitative data collected next to flesh out the initial quantitative results. In-depth observations, obtained through interviews, offered strength to the quantitative data obtained from raw discussion board transcripts. This qualitative data collection entailed personal contact between me and the subjects, providing me with richer descriptions of their activities and a much deeper understanding of the myriad of issues involved than would be possible from quantitative data alone.

The study was framed within an interpretivist paradigm which considers that “a primary aim of social science is to understand what people mean and intend by what they say and do and to locate those understandings within the historical,

cultural, institutional, and immediate situational contexts that shape them” (Moss et al., 2009, p. 501). Denzin and Lincoln (2011) stated that an interpretivist paradigm “assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent co-create understandings) and a naturalistic (in the natural world) set of methodological procedures” (p. 13). Crotty (2005) differentiated between *creating understandings*, a subjectivist epistemology that sees meaning as being created by individuals, and *constructing understandings*, a constructionist epistemology that holds that people construct meaning together in relation to their engagement with their human world. My study, with its focus on generating knowledge about the practices of online tutors from the actions and reflections of participants, operated within such a social constructionist epistemology.

To manage and organise the collected materials I used a multiple case study design. A case study approach was chosen as an appropriate interpretivist approach to investigating and understanding tutor experiences in an online learning environment. Recent research on teaching presence within the online learning environment (see Chapter 2) has identified that there is a real need for further evidence to identify best practice models of online pedagogy. Specifically, my research sought to identify which teaching presence indicators were evident, in what volume, and the reasons for their presence identified by the tutors involved. The collection of multiple data allowed this search to fit within Yin’s definition of case studies, which asserts that case studies do not need to have a minimum number of cases and can be single or multiple case design (Yin, 1994). This study contains more than a single case and can therefore be characterised as a multiple case study.

Research Design

The previously outlined COI framework of online learning (Garrison et al., 2000) guided this research. The COI framework theory, methodology and instruments were developed during a Canadian Social Sciences and Humanities Research Council-funded project (1997 – 2001). Central to the original study was the creation of a model of COI that comprised three essential components of an educational experience, one of which, teaching presence, attributes the success of a community of learners to the interactions between instructors and students. As noted in Chapter Two, teaching presence is structured around three elements: instructional design and organisation; facilitating reflection and discourse; and direct instruction (Anderson et al., 2001). These three elements were used to frame the design and guide the progress of this study.

The research was conducted in three phases (Figure 3.1).

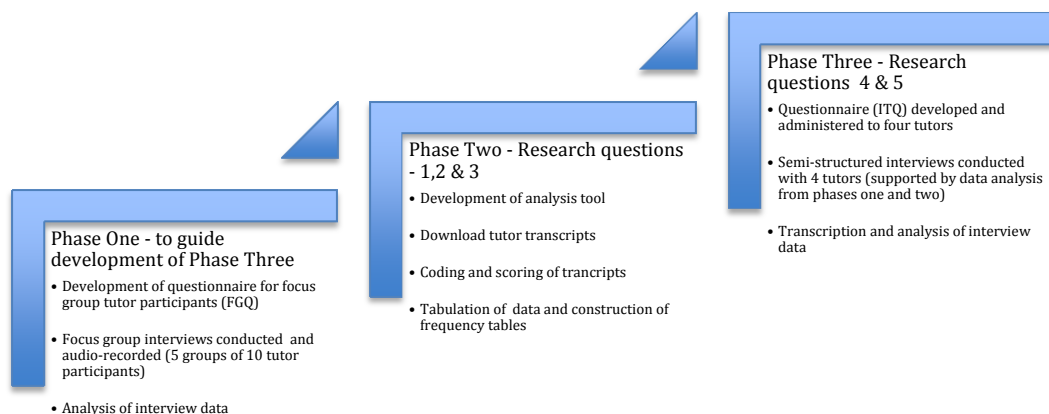


Figure 3.1. The Three Phases of the Research

Each phase of the research design included several stages, as outlined below.

Phase One: *Focus group interviews* – *Identification of issues relevant to online teaching, specifically related to the support of student learning through discussion board interactions.*

As stated earlier, many members of the teaching staff were new to online pedagogy. It was important to ensure that they had effective online teaching skills. To support tutors who were working in the online environment, at the time of this research, university paid training was provided before each of the four 12-week study periods. An additional paid training session was offered for those tutors who managed the units (unit coordinators). The training sessions were completed in small groups where the model was one of peer support. Experienced tutors worked with less experienced tutors, offering them a range of experiences over a six-hour session. These included such things as presentations and discussions on the theoretical underpinnings of online pedagogy, strategies for being an effective tutor, technology support and provision of specific information about the unit that they would be teaching.

A group of 52 tutors, including unit coordinators, attended a training day three weeks before the start of study period two, on the 21st of May 2011. I also attended and gave a short presentation on my study. All participants were given the choice and agreed to participate in this part of the research and signed a consent form (as part of the questionnaire) prior to the interviews taking place (Appendix A). The total group was divided into five separate groups of around 10 participants. Each group moved into a separate room. Each group had been allocated a facilitator, who had been extensively briefed by me, and whose goal it was to generate ideas and opinions in the allocated time of one hour while remaining neutral. Focus group discussions were structured around a set of seven pre-determined questions

(Appendix A) but the objective was to keep the discussion free flowing in the hope that comments would stimulate and influence the thinking of others.

The main purpose of these focus group interviews was to elicit information that would assist in understanding some of the dynamics of online communication from the educators' perspective. A focus group approach was adopted because the number of tutors was too large to allow complete individual interviews within the time schedule of the study. One of the advantages of focus group data collection is that the participants generally feel more comfortable than in an individual interview and hence enjoy the experience (Robson, 2002). Additionally, group dynamics help to maintain focus on the relevant topics whilst providing mutual support.

The specific aim was to identify the aspects of their individual teaching roles relating to interaction and collaboration that online educators considered to be significant, and how these tutors accounted for the decisions that they made to support engagement within their online teaching groups. The interviews were designed to obtain, through guided questioning and discussion, answers to the following set of questions.

When thinking of their role of online tutor and the goal of developing online interaction with and between students:

- 1. How did they consider that they supported the learning of their online students?*
- 2. Did they consider frequency of interactions to be a useful indicator for student success?*
- 3. Did they find that the pattern of interaction changed over a study period?*
- 4. What issues did they identify that impacted on the quality of interaction?*
- 5. How useful did they consider the provision of professional development to be*

in supporting their teaching?

The focus group interviews were audio-recorded, and the recordings were analysed using a content analysis approach to identify common issues and themes. I chose not to transcribe the recordings, believing that this would allow more sensitive deliberation upon the interplay of voices, meaning and the situation. It was important to understand what these groups of tutors thought, and listening to how they stated their views allowed a better understanding of their thinking to emerge.

Overview of Phase One

The focus of this aspect of the study was to investigate the perceptions of the experience of being an online tutor within an undergraduate pre-service teaching degree. The questionnaire was designed to ascertain the beliefs of this large number of online tutors about online teaching presence and to establish the factors that influenced their teaching role. It identified, through guided questioning and discussion, how these tutors believed that they were supporting the learning of their online students and what factors decreased their ability to do this effectively. Table 3.1 summarises Phase One.

Table 3.1

Overview of Phase One – Focus Group Interviews

Stage A	Focus Group Questionnaire (FGQ) developed
Stage B	Using the questionnaire FGQ as a basis for a group interview, five separate focus groups of online tutors ($N=52$) participated in a semi-structured discussion around issues related to online teaching and learning. These interviews were audio recorded
Stage C	Analysis of recorded interviews

The analysed data from Phase One was used to support the development of the Individual Tutor Questionnaire (ITQ, Appendix B) that was subsequently used in

Phase Three qualitative interview data collection with four tutors (Marco, Leanne, Nelle and Jean) individually.

Phase Two: Analysis of online transcripts of discussions involving the four tutors – *Identification of volumes and types of posts made by tutors specifically related to the teaching presence indicators within individual discussion boards.*

Online transcripts are considered by many researchers to be a rich source of data when investigating online interactions (Garrison & Anderson, 2000) Gunawardena, Lowe & Anderson, 1997; Henri, 1992; Salmon, 2011). Within the researched teaching unit, tutors and students communicated extensively and asynchronously by means of a range of discussion board forums. This generated a significant amount of text. All messages were downloaded from the Blackboard LMS after the completion of the teaching period. All of the messages between tutors and students were collected from the four discussion boards. For this particular study, only the messages from the tutors to their students were used in the data collection and analysis. The tutors' messages were analysed using the COI framework outlined by Garrison and Arbaugh (2007), outlined in Chapter Two. Content analysis of the discussion board interactions (Appendix C) identified both the frequency and types of interactions that related to the teaching presence indicators identified as part of the COI framework.

Using the 19 indicators included within the three elements of the teaching presence category of the COI framework, the online transcripts were analysed to answer the first three of my research questions:

1. *What proportion of the online discussion is characterised by teaching presence examples of **instructional design and organisation**?*
2. *What proportion of the online discussion is characterised by teaching*

*presence examples of **facilitating reflection and discourse**?*

3. *What proportion of the online discussion is characterised by teaching*

*presence examples of **direct instruction**?*

The following tables highlight the indicators within the three elements of teaching presence. As identified, each of the discussion boards of the four tutors was downloaded separately. The transcripts were coded and analysed by matching to the COI framework as outlined previously (see Appendix C for sample). Each transcript was coded first to one of the three elements instructional design and organisation (1), facilitating reflection and discourse (2) or direct instruction (3). Within each of the categories they were then coded more specifically to an indicator.

Instructional Design and Organisation was coded as Element 1, with the indicators coded as below. For example, the first indicator (setting curriculum) was coded as 1/1, meaning that this was the first indicator in the first element. The following table (3.2) illustrates each of the indicators with exemplars taken from the study.

Table 3.2

Instructional Design and Organisation - with Sample Tutor Examples

Instructional Design and Organisation (Category 1)	
Indicators	Examples
Setting Curriculum (1/1) (Level 1/ indicator 1)	If you have any questions regarding the unit, please do not hesitate to ask. (Leanne)
Designing methods (1/2) (Level 1/indicator 2)	
Establishing time parameters (1/3) (Level 1/ indicator 3)	
Utilising the medium effectively (1/4)(Level 1/ indicator 4)	Please click reply to this thread to post your ideas about this topic (Nelle)
Establishing netiquette (1/5) (Level 1/ indicator 5)	
Making macro-level comments about course content (1/6) (Level 1/ indicator 6)	If you are completely new to online study then you may be feeling a little overwhelmed. This is completely normal. I know that it can sometimes feel that you are completely alone, and that everybody else knows what they are doing. I can guarantee there are many students who find the whole process rather challenging. There is lots of help available. Take it slowly and don't expect to understand everything right away (Leanne)

Facilitating reflection and discourse was coded as Category 2, with the indicators coded as follows in Table 3.3.

Table 3.3

Facilitating Reflection and Discourse – with Sample Tutor Examples

Facilitating Reflection and Discourse (Category 2)	
Indicators	Examples
Identifying areas of agreement/disagreement (2/1)	Including ‘feelings’ is the one area of the reflection that is NOT wanted. (Leanne)
Seeking to reach consensus or understanding (2/2)	Actually Kim you have missed my point. The large majority of students chose to answer the before and after sections of ... many of these students got good marks for those two weeks. (Leanne)
Encouraging, acknowledging or reinforcing student contribution (2/3)	Yes you are definitely on the right track. Your brainstorm contains the relevant information and is easy to understand (Nelle)
Setting the climate for learning (2/4)	Hi Andrew there is enough information here for a full assignment. Great visuals, which connect perfectly with your summaries. Good range of references to support your academic writing. Thanks for being so motivated. (Nelle)
Drawing in participants, prompting discussion (2/5)	It would be really great if we could build a sense of community by sharing other aspects of our academic journey. I would be interested to know – what aspects of this course and type of studying are you finding challenging and which are you enjoying and finding motivating? (Leanne)
Assessing the efficacy of the process (2/6)	

Direct instruction was coded as Category 3, with the indicators coded as follows in Table 3.4.

Table 3.4

Direct Instruction – with Sample Tutor Examples

Direct Instruction (Category 3)	
Indicators	Examples
Present content/questions (3/1)	This week we are looking at motivation. I would imagine that you found it particularly relevant in your current situation. You have to believe that you have the intelligence and capabilities to compete the course and you have to be goal focused. I have attached two articles from the Sunday Times which are relevant to the discussion on motivation. What do you think. Should canes be used in schools? What do you think about that strategy to encourage teenage Aboriginal girls to attend school and can you related the information back to the theories discussed in your text book? (Leanne)
Focus the discussion on specific issues (3/2)	Instead of simply posting your ideas make this a more valuable learning experience by commenting on other students' answers. Can you support your ideas with research? Can you improve on another student's response by extending it? Answer the following three questions ... (Nelle)
Summarise the discussion (3/3)	
Confirm understanding through explanatory feedback (3/4)	You are correct. Although you should be completed the journal section of assignment 1 each week, it is not actually submitted until August (Mario)
Diagnose misconceptions (3/5)	Although writing is a skill and like all skills improves with practice, the level of development will determine what he can do (Joan)
Inject knowledge from additional sources (3/6)	My honours research looked at collaborative learning. The results showed that the only students who benefitted were those who were paired with a more knowledgeable partner... (Leanne)
Responding to technical concerns (3/7)	Hi, you have posted successfully. If you ever want to check you need to click...this will open up ...at the bottom...click on this... (Leanne)

Table 3.5 provides an overview of Phase Two – analysis of online transcripts.

Table 3.5

Overview of Phase Two – Analysis of Online Transcripts

Stage A	Development of analysis tool
Stage B	Download all four tutor discussion boards over a 12-week study period
Stage C	Code and score all the postings. Tabulate the data and construct frequency tables

Phase Three: *Qualitative data collection – semi-structured interviews with the four tutors* – *Exploration of tutor perceptions of quality teaching within an online environment and comparison of perceptions with evidenced practice.*

The findings from the analysis of the data collected from the focus group interviews, along with the analysis of the online transcripts, informed the development of Phase Three. To support this phase of the research, a detailed questionnaire – the ITQ – (Appendix B) was developed and sent by email to the four individual tutors several weeks before the semi-structured interviews took place and four months after the educational psychology unit had finished (allowing time to complete phase two, and providing time for the tutors to reflect on their practice). The ITQ was designed to ascertain these four tutors' teaching beliefs and practices and to establish if there was any dissonance between the belief and the practice. The ITQ involved two distinct sets of questions:

- The first set of questions was related to teaching beliefs. Questions were based on the analysis of Phase One data. The questions were designed to elicit their beliefs about teaching and in particular, which aspects these tutors believed were common to classroom and online teaching.
- The second set of questions asked tutors to discuss those aspects of their teaching specifically related to the educational psychology unit. The questions were based on the indicators from the teaching presence aspect of the COI framework (as outlined in Tables 3.2, 3.3 and 3.4), and designed to investigate any variation between teaching beliefs and practices related to the accounts that individual tutors gave for their teaching within their unit.

Once the participants had completed the ITQ, they returned it to me for analysis. My analysis of interviewees' answers and comments determined the design of the

follow up semi-structured interviews and was used to guide the four individual interviews. Although the emailed and face-to-face questionnaires contained identical content, analysis of responses to the written questionnaire allowed me to prepare more probing questions to expand on the previous data in the face-to-face interviews. This aspect of the research was designed to ascertain how the four individual tutors accounted for the volume and quality of their comments on the discussion board of their individual groups, and respond to research questions four and five.

4. *Which teaching presence components do tutors believe are important in supporting learning?*
5. *What factors impacted on tutors' ability to provide a visible teaching presence?*

Three of the four individual interviews were completed in an office of the University in early 2012. The conversations were recorded and transcribed with permission from each of the participants. One of the tutors was unable to attend on the scheduled interview date and I conducted and audio-visually recorded a Skype interview on a subsequent day.

Participant interviews are a valid method of gathering qualitative data (Fontana & Frey, 1994) and formed an important part of my research process (Denzin & Lincoln, 2011). In my study, I used semi-structured interviews to elicit information about tutor attitudes, expectations, beliefs and concerns around the teaching presence data that I had previously collected from the online discussion boards and analysed. The topics focused on the teaching presence experience, particularly relating to their choices for interventions and efforts to support learning, with special attention being paid to the different roles that tutors had to adopt, the problems they had anticipated and any future plans that they hoped to implement to

address any of the problems they identified. Table 3.6 provides an overview of Phase Three.

Table 3.6

Overview of Phase Three - Semi-Structured Individual Interviews with Four Tutors

Stage A	Development and implementation of emailed questionnaire (ITQ)
Stage B	Analysis of questionnaires to support semi-structured interviews
Stage C	Individual audio-recorded semi-structured interviews ($N=4$)
Stage D	Transcription of four semi-structured interviews.
Stage E	Analysis of individual transcription to identify themes

Reliability and Validity

The term “reliability” is replaced in this thesis by more appropriate terms such as credibility and transferability, as suggested by Lincoln and Guba (1985). Multiple data sources and triangulation were used to maximise the credibility of the results. Multiple sources essentially provide multiple measures of the same phenomenon (Yin, 1994). Similarly the concept of “validity” in qualitative work is essentially equivalent to quality, rigour and trustworthiness (Lincoln & Guba, 1985). Validity, in qualitative research, refers to whether the findings are true (research findings accurately reflect the situation) and certain (research findings are supported by the evidence). In my study this was achieved through triangulation of the data. Triangulation allows researchers to check and establish validity in their studies by analysing a research question from multiple perspectives (Patton, 2002). To answer the research questions, I analysed data collected from five separate focus group interviews, online transcripts and individual interviews with four tutors.

Asking a group of tutors to reveal their personal thoughts and reflections, and allowing themselves to be questioned regarding the effectiveness of their teaching, posed a potential difficulty for me, as I had previously been employed as this group’s

line manager. This created the possibility that power relationships could create the potential for biased responses. This was resolved by assuring the participants that none of the divulged information would be used in any way that might affect future work opportunities. Additionally, I chose to use pseudonyms throughout the thesis to protect their identity.

I guaranteed that the data would only be seen by me and my university-based supervisor, and at all other times questionnaires and other research materials would be locked in a filing cabinet in a secure university office.

Ethical Considerations

Formal ethics clearance for research involving humans was sought and granted through the University's Ethics Committee. All participants completed a written informed consent form before they engaged in the research. The informed consent form acknowledged the protection of participants' rights during the collection of data and distribution of results. The participants were informed that they had the right to withdraw from the study at any time.

Care was taken to maintain the confidentiality and anonymity of the university setting, the participants and their responses. The use of pseudonyms protected individual identities in the presentation of information and in direct quotes.

Limitations

A classic limitation of this type of study is the difficulty in generalising to populations or universes (Yin, 1994). The main focus of this study was the four tutors who worked in the same first-year undergraduate teaching course. Each of their discussion boards had the same weekly topics and the content of the materials was identical. It cannot be asserted that all online tutors will teach in the same way as those who participated in this study. However, the findings generated from this

study will be open to interpretation by other researchers and are able to be modified for other contexts.

A second limitation was that little data was available for two of the 12 weeks for one tutor and three weeks for another. This occurred because a separate research project required students not to post within the discussion board but to use a blog instead for those weeks. Analysis suggested that this did not impact negatively on the results of the study, and it was decided to present the data collected rather than change participants midway through the study.

A third limitation was my personal involvement in this unit. I had been a member of staff when the unit was developed and line manager of the four case study tutors and the focus group tutors, and had responsibility for their initial appointments. My involvement could have influenced my analysis of the data. However, when the research took place I was no longer in that role and working interstate, and it was therefore felt that no conflict of interest would impact on the data collection or the participants' responses.

Finally, it should be noted that my study revealed quite a few practices that have been eliminated or changed since 2011. That is, the project was a 'warts and all' review of practices that occurred at the beginning of a major teaching revolution at the university. As such, the facts I educed need to be considered in the context of an honest and authentic appraisal of the early days of large-scale online teaching in Western Australia.

Summary of Chapter

This chapter described the methodological approaches used within the study, including the research setting, participants, research design, data collection, data analysis and ethical considerations. The focus of the study was to explore the beliefs

and practices of tutors and relate them to engagement within an online teaching environment.

The following chapter, Chapter Four, provides an introduction to the remaining chapters and presents the results of Phase One of the data analysis.

CHAPTER FOUR

Focus Group Interviews

In the previous chapter I discussed the research methodology utilised within this study and outlined the three phases of the research. This chapter, Chapter Four, contains the results of the data collected for Phase One and its interpretation.

Background

As outlined in Chapter One, in the West Australian University's Bachelor of Education, Primary online degree in 2011, each tutor was responsible for a group of approximately 75 students, giving content-specific support for learning through a Blackboard site designed to encourage collaborative learning. Although studies have suggested that the ideal group size number for online tutorials is less than 30 (Anderson, 2004; Arbaugh & Benbunan-Finch, 2006), at West Australian University, neither commercial realities nor access to qualified, experienced schoolteachers to support the learning permitted such a low staff-to-student ratio.

For many staff as well as students, being part of an online learning community is a new experience. As identified in the review of the literature in Chapter Two, many tutors come to online teaching with little relevant background, training or experience and may have little understanding of the complexities and importance of the role. Before any examination of the interactions within the discussion board sites, it was important to gain an understanding of the dynamics of online communication from the educators' perspective. This aspect of the study sought to identify the issues considered by online educators to be the significant aspects of their individual teaching roles. I identified how this group of tutors perceived teaching presence in this online environment, specifically relating to the concepts of interaction and collaboration. As outlined in Chapter Three, five focus

group interviews (each with an average of ten tutors) were conducted with the full cohort of tutors ($N=52$) who were to be employed within the wider research setting of the online Bachelor of Education, primary degree (not necessarily within the educational psychology unit on which my research focused). All were certified schoolteachers, qualified in either primary education or in secondary education, with a range of additional educational qualifications and experience. Thirty-five held undergraduate qualifications, 12 had Masters degrees and five had Doctorates. Ten of the tutors were about to commence their first study period of online teaching and six tutors had already completed eight study periods, having worked in a range of units since the degree commenced. The remaining 36 tutors had experience ranging from two to seven study periods.

Phase One – Focus Group Interviews

This first phase of the research was designed to ascertain the beliefs of 52 online tutors about teaching presence and to determine the factors that impact on their teaching role. A qualitative interpretivist approach, as described by Merriam (2002), was selected because the focus was on the perceptions of the individuals who shared the experience of online teaching in the one course. This approach allowed for an examination of the experience of being an online tutor and how these tutors accounted for the decisions that they made to support learning through engagement within their online teaching groups.

When the tutors were asked to share their beliefs around the concept of ‘interaction’, they used the words engagement and interaction as equivalent and interchangeable terms. For this group of tutors, those students who participated online were defined as being interactive and engaged. There was a common notion of engaged students as being successful students, and those who were not active

participants as being less successful. All five groups responded similarly, commenting that “interaction equates with success”, and that “the more students interact, the more understanding they will have of the content.” They expressed a belief that a large part of their work involved finding ways to ensure that engagement is established and then maintained to ensure success for their students. However, when asked if they had compared results of those who interacted and those who did not, no one could demonstrate any real evidence of this. It appears that for this group of tutors, the online teaching role comes with a range of both positive and challenging aspects that were demonstrated through three main areas of interaction and engagement:

- Engagement of and with students through online interaction;
- Engagement of and with other tutors through intellectual growth and development; and
- Engagement of tutors with their families.

Engagement of and with students through online interaction

A common positive aspect of online tutoring identified in these focus groups was that as off-campus tutors they did not need to attend a physical workplace where there was likely to be politics and other issues to deal with each day. They also did not miss travelling in rush-hour traffic, and appreciated the opportunity to be stay-at-home employees who were allowed to work autonomously and generally independently “in pyjamas,” should they so choose, while enjoying “watching students grow and develop” over the 12 week study period. This meant that the focus of their teaching could be on the students and not on any outside issues present in a typical university workplace environment.

This focus on students gave tutors many opportunities for “connecting” and

“building relationships” with students. This ability to bond with their students was unanticipated, with several tutors expressing surprise and real pleasure at this aspect of their work. Before taking on the role, they had believed that there would be little opportunity for relationship building in an online environment, visualising it more as a distance course that many had experienced as postgraduate students. However, within this role, they identified that the opportunities for getting to know their students and ultimately to support their learning through these positive relationships were much greater than expected.

Although the groups expressed their surprise and pleasure at the connections that they made with their students, they acknowledged that the distance factor did reduce the opportunities for this to develop further in some cases. This course attracts staff and students from around Australia and internationally, and tutors agreed that both they and students could experience feelings of “being alone”, “isolation” and that for many tutors an aspect of the role was in “trying to overcome the distance factor to ensure that each student feels special.” Distance also means time differences that can have an impact in “maintaining the discussion,” “keeping students motivated” as well as causing problems in “ensuring that students continue to engage.” Tutors found some difficulty in “keeping discussions alive, when students are posting at different times.”

Tutors explained that their students often have busy lives outside of their study and need to be made to feel that engagement was an important asset to their learning. Tutors were not meant to respond to personal emails, but this was not always easy to explain to students. These data show that for some students there is a mismatch between tutor and student expectations.

Many of my students just want a quick fix answer and want to get me to always respond to them by email. I work hard to encourage them to share on

the discussion board. I try to stress the importance of contribution as a tool to learning.

They have to learn that it is not about feeding them the answers.

Needy students seem to not want to be active participants. They don't realise that always getting the answer from me is not going to help with real understanding. If I can't get them active on the board, they stay needy students and are unlikely to be successful.

Related to this viewpoint, the tutors shared a strong belief that if students were given marks for participating within the discussion boards, then the interaction would be much greater. Similar comments were “participation on the discussion board should be worth at least 5%” and “if they have not interacted they have missed the plot and if we gave marks that would keep them on the board.” One group felt that the interactions could be “peer assessed with the evaluations earning one or two marks.”

Several tutors highlighted areas of concern around how best to relate to and support their students. They discussed ideas of what online learning should look like and gave some common responses, agreeing that the newer students were the ones who probably needed the most support.

I feel that many of the first-year students need a lot of tutor guidance before they can be successfully engaged.

They need so much help with interpretation...and need so much direction.

Some students are so nervous of technology that it holds them back.

... they just want everything handed to them...

... they need to learn to keep to guidelines and the repercussions of not doing so.

It's not about feeding answers...it should be about trying to create a workshop setting where everyone feels comfortable about jumping in....give fewer choices to students in the beginning...and increase the choices as confidence grows... they have to learn to work together...contribute and complement one another...learn to take constructive criticism.

One tutor explained that often it was not anyone's fault that the interaction was not as successful as it might be because sometimes the tasks that students are asked to do "mitigate against quality interaction." He was supported in this by a range of responses.

The tasks need to encourage interaction rather than just posting ideas about something.

We need to be offering more open-ended tasks...asking them to work out what is the best way.

... make professional judgements...use of Bloom's taxonomy.

... bringing it back to how this might work in the classroom.

... I like to give examples of what I did in the classroom.

Several tutors also felt that the LMS set-up was not always conducive to the interactive process with "too many posts taking too long to read" and forums being too "cumbersome." One tutor felt that perhaps in the "maze of posts" some important messages got missed. He felt that as an on-campus tutor, the relaying of important information was more successful in that:

You stand out in front of the class and tell them, "this is important information" and generally they sit up and pay attention. It is much trickier online, and I have no real way of knowing if my message has been heard or understood.

It was also felt by some tutors that clicking between discussion board threads was "clunky and not user-friendly." Although tutors had the opportunity to create discussions boards according to their own preferences, it was felt that "the set format impacted on opportunities for innovations" that they might want to experiment with.

Other comments highlighted that many tutors actually expect more collaboration than many students are able to give:

... the equivalent face-to-face cohort attends a two-hour class for each of their units, and do not have much engagement out of that time. Whereas the online students are expected to be online several days of each week, and if

they are not, we are sending out emails asking them where they are. Perhaps this is an unreasonable expectation.

Other tutors believed that there could be a problem with mixed messages about online learning and that the University's marketing team was giving students unrealistic messages about online learning.

...when we look at the adverts (for the course) it suggests that students can study anywhere at any time and take however long they like. When they get here they discover that it is not as flexible as they think. We have timelines, deadlines and expectations. Some of them find that really hard to deal with and they are not ready to commit to the amount of active participation that we expect from them.

One of the tutors with a background in high school teaching felt that many of his students reminded him of some of his secondary school students in that "they are often too quick to say 'I don't understand'. They don't take the time to read things through or to practise pulling out the information that is there." He felt that they needed to be encouraged to take the time to see what others are saying and to respond to that. He believed it was necessary to develop a "culture that involves giving and taking constructive criticism from their fellow students" and that perhaps some of the online activities could be designed to support this development.

Because they tutored in a pre-service teaching course, many of the participants recognised that part of the role was about developing skills that would be needed when these students become professional educators. They felt a need to model the types of behaviours that would be required in a school setting. Some tutors felt that "teaching theories is only part of the learning" and that additional opportunities for learning other things were equally important. "Those students who engage with one another on the discussion board develop skills in collaborating around the content. These collaborative skills are crucial for teaching practice." This group agreed that these "collaborative skills would be essential in the development

of professional attitudes and behaviours.” They felt that if schoolteachers did not “learn to work in teams while they were studying”, then they may well “struggle when they had to be part of a school team.” As part of their professional development they would have to learn to “take feedback” and to “develop professional skills.”

Teaching is a culture...and they have to understand what this means. When they collaborate on a discussion board with peers who come with a range of experiences this supports the development for them. It can't always be got out of a textbook. They have to learn to bounce around their ideas to come to a shared understanding of the issues. This is what they will need to do in the school setting.

Although these tutors believed that teamwork and collaboration were essential skills to master not only throughout their course but once they were employed within the profession, it was also felt that some students wanted to be “spoonfed”, and that this was not a good way to develop the independence that they would need as schoolteachers.

They have to learn to work out what is being asked of them and develop strategies for problem solving. I keep throwing it back to them. “When you are responsible for a group of 30 children, there will be no one to ask how do I do this?” They need to start working out how to do things for themselves.

Just as tutors suggested that they enjoyed learning within an environment where they felt safe to try things out or ask questions of peers, one tutor believed that “for those students who have difficulty articulating their thoughts”, it was essential that she “try to encourage a supportive, safe environment.” This was amplified by a different tutor as a need for students to “demonstrate understanding and realise that it is not about regurgitation. Conversing with their peers is how they will get to this understanding.” Another tutor recognised interaction as an avenue of supporting and developing his students who did not have English as their first language, saying that “the ESL students really benefit from conversing online. They discover that other

students support them and correct them.” However, it was also noted that this had to be done carefully so that those students who struggled with English structures were not made to feel inferior or uncomfortable to get things wrong. They had to get the balance right in supporting the development of learning, while supporting a comfortable and safe environment where it was all right to take risks. It was suggested that opportunities need to be created that are more like an on-campus workshop where the conversation is ongoing and everyone “jumps in when they want to contribute.” In this way students are able to “feed off one another’s ideas and develop.” However, because students and tutors operate within different time frames around Australia as well as overseas, it was agreed that asynchronous discussion was not particularly conducive to student-to-student collaboration, with many tutors stating that they were investigating ways of creating synchronous opportunities for engagement.

Most tutors identified that by around the halfway mark for the unit, by week six or seven, very few students were involved in the discussion board. The tutors admitted that they struggled to do anything more than answering the questions of students who posted. They explained that in many of their groups there were only two or three really active students by the end of each unit’s time frame. It was generally felt that if there had been opportunities for live discussion, some students who were not active participants would have taken the opportunity to be more highly engaged.

Engagement of and with other tutors through intellectual and professional growth and development

Whilst admitting to being surprised by the degree of engagement with their students, the tutors also identified that they really enjoyed being part of a cohort of

peers who offered support and encouragement to one another within the online environment. Many of the units they taught were much larger than similar on-campus units, with many having 2000 students with at least 30 tutors. As well as being involved with their students several times each week, the tutors were encouraged to be active participants within the virtual staff lounge. This forum sat within the LMS and was the first port of call for many tutors when they logged on to start their working day. It offered many opportunities for tutor support and development, allowing communities of tutors to develop. As their students did not have access to the lounge, tutors were able to share concerns around materials and assessments in a timely manner. The lounge also facilitated sharing resources and ideas. They considered that this created a “strong collegial sharing aspect to the role” with tutors “happy to allow others into their discussion board” to see how they had set things up and that they felt “welcome to use other tutors’ ideas and materials. Tutors were also “delighted” and “pleased” at how well tutors supported one another within units. This collegial environment enabled tutors to grow and develop in their role, but was also somewhere that they could go when things were not going as smoothly as they might and where they could share with others who would understand what they were experiencing. They believed that not only were students being encouraged to be socially engaged, interactive and collaborative, but that these traits were crucial in ensuring that they became and remained effective in their teaching role.

For many of these tutors, this was their first experience of tertiary teaching and with working with adults instead of children. This change in role had given them some cause to critically reflect on the learning and teaching process. They recognised that although teaching skills are able to be transferred, they had to think

of different ways of teaching that were more appropriate for, in many cases, a much older cohort of students than they were used to. Additionally, they were working within an online environment, which was also a new experience that required “a new set of skills.” They enjoyed the intellectual engagement that this offered and welcomed the opportunity to develop and grow within their profession, stating that they benefited from the “intellectual challenge” of the role while “learning new skills,” and working out the answers to “thought-provoking questions” whilst “assisting people to achieve their goals.” Others were keen to develop their skills within a different environment and with a different age group cohort while being “kept informed of the latest trends and developments in education” and encouraged to “expand on my IT skills”, “challenge my own abilities” and “develop a pathway to academia.” It also offered “opportunities to access current academic resources such as professional journals.” They believed that lifelong learning opportunities were being encouraged and supported not only by the university but also by their online peers.

As identified earlier in this chapter, as well as through their online peer support, tutors were offered an onsite professional development opportunity four times each year to coincide with the beginning of each of the teaching periods. Tutors of varying ages and career stages grasped these opportunities for professional development. Many tutors could identify how professional development often was offered in schools. In recent times, many schools expected schoolteachers to be involved in off-site, after-school learning. After a busy day in the classroom, these sessions were generally unwelcome and often irrelevant. In contrast, these tutors stated that the university’s onsite and online training was very supportive to their development as online tutors. The groups were very positive in their responses and

demonstrated a passion for continuous learning around their teaching role. They agreed that being together in a learning community was a very powerful initiative, with comments such as “I love these training sessions, I always come away feeling energised with some new ideas”, and “I learn something new each time I come to a training session”, along with “I can see us all improving each time we meet up. I love being part of such a large group of people striving to improve what we do.”

While the tutors universally enjoyed the independence of their online role, independence had a less positive side. Many identified isolation as an issue to overcome, and noted that they derived significant benefit from face-to-face interaction as well as the virtual support. “Getting us all together is so important. It can be very lonely out there. Collaboration is such an important aspect.” Another tutor supported this notion by stating “It is great to have opportunities to share with more experienced people. I know that I can feel comfortable to ask anything,” suggesting that they felt part of a community of practice where common goals were shared and encouraged to develop within a safe environment and where more experienced tutors were taking on an unofficial mentoring role.

Engagement with their families

For this group of tutors who chose to work from their home environment, time management was an important concern. They reported that they struggled with the competing demands of work commitments and family. Common responses were: “I spend many hours developing relationships with my students”; “the hours of work impact on my family life”; and “I have to work hard to ensure that the workload does not encroach on family time.” One tutor described the work as a “constant battle to support students without spreading myself too thin” and another noted that “while I want to support my students, I have a family who want my attention too.” Yet

another tutor explained that although she had to set time aside each day to respond and support students, it was also essential to “compartmentalise the job so that it doesn’t become all time consuming.”

Relating to the work-life balance theme and time management issues, tutors agreed that the balance between giving students the amount of feedback that they wanted and the realities of the job were hard to maintain when “students want instant feedback.” It was suggested that in a new world of people who want “instant gratification” that it was often difficult for students to understand the realities of the tutor role. One tutor explained that it was not unusual for students to send several emails over the weekend “demanding tutor attention.” She felt that some of these students could make the job “very stressful” with “really unreasonable expectations.” It was also agreed that many students were very “needy” and often appeared not to read the posts or unit materials, preferring to “email the tutor direct for an instant response.” The model for teaching employed in this program encouraged students to be interactive on the discussion board through online participation and engagement with their peers. The expectation was for a group of students to be active participants who support one another through the discussion board. However, the tutors noted that many students appeared to want to fast track to the tutor via email for a quick response, meaning that tutors had to constantly remind their students to take their questions and problems to the discussion board. The dilemma for the tutors was to do this in ways that ensured that students felt “supported” and “encouraged” and encouraged inactive students to engage in the learning process.

Overview and Discussion of Focus Group Interviews

Universities place a high priority on positive student experiences, particularly in an era of aggressive competition. These experiences are enriched by a sense of

connection with the university as well as with fellow students. The building of a sense of belonging is important in fostering and enhancing engagement. However, engagement in a learning community is not always considered in positive terms. It can be thought of as just another chore to complete within a busy student's working life. To increase the likelihood of positive student engagement, both with their university and with one another, it is important to recruit and train teaching staff who understand how best to support and develop students through the use of a range of effective online teaching and learning strategies.

I conclude this chapter by summarising the major findings of this aspect of the study with respect to the questions that guided the focus group interviews. I highlighted the perspectives of this group of online tutors on the development of interaction as part of their teaching. These findings are reiterated and supported by other results in coming chapters.

How did they consider that they supported the learning of their online students?

The consensus was that online teaching presence was an essential requirement in supporting engagement with and among their students. However, this was not always easy to maintain.

Was frequency of interactions a useful indicator for student success?

Although most tutors agreed that interaction by students was conducive to success, with engagement and interaction being used interchangeably, they identified some problems in encouraging and maintaining high-quality engagement. No tutor could provide any evidence of a positive correlation between level of interaction and student success.

Did the pattern of interaction change over a study period?

This group of tutors reported that they never had a full cohort of students for an entire study period, with a large drop-off in engagement by midway. By the final weeks of the unit only two or three students remained active, with their tutors struggling to do more than answer their questions.

What issues were identified that impacted on the quality of interaction?

This group of tutors identified several obstacles to quality interaction. Their teaching presence was believed to be of little value if their students were not online with them. Although the tutors believed interaction, engagement and learning to be synonymous, and that collaborative skills were a necessary prerequisite for a practising teacher, few of their students provided any evidence that they grasped those concepts. Many students wanted a direct question-and-answer relationship with their tutor, and chose not to take advantage of the interactive opportunities. This type of support was too overwhelming and time-consuming for the tutors, and providing it could damage their relationships with their families.

Some of the learning activities – or the LMS system itself – were not conducive to effective online interactions; therefore, students opted for the shortest and most convenient route to the information by emailing their tutor. The tutors stated that they would have welcomed opportunities to try new ways of engaging students through different forms of technology, but in order to maintain consistency across the large cohort of students – individual, innovative practice was not an area of their role that had been encouraged.

How useful was the provision of professional development in supporting teaching?

Tutors generally agreed that they felt supported in their teaching role, and

valued the opportunities for collaboration and improvement of practice offered by both university and their peers.

As identified in my focus group interviews, the work of an online tutor has positive and negative aspects (like all jobs). Although ICT and tutors' flexible hours and conditions meant they could work from home, some reported problems in separating work from home. Students' expectations of continuous engagement meant continuous engagement of tutors. The following chart (Figure 4.1) provides an overview of the role of online tutor from the overall perspective of the five focus groups of tutors.

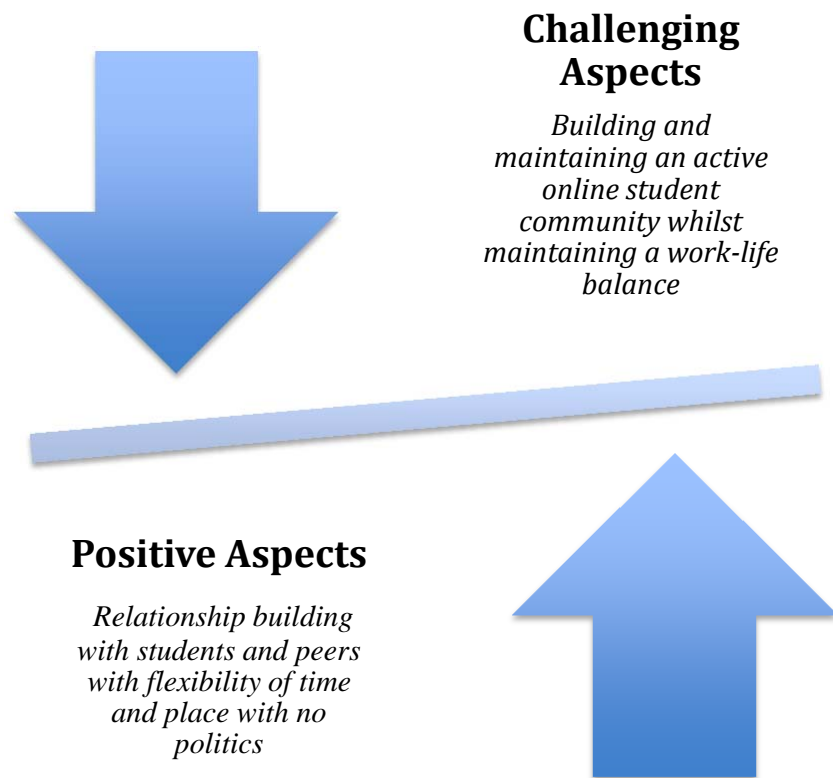


Figure 4.1. Positive and Challenging Aspects of Online Teaching

Summary of Chapter

My analysis of the data from the tutor focus groups presented in this chapter identified some of the key issues associated with being an online tutor within an undergraduate teaching degree. This group of tutors was employed to work across a range of units and year levels. I sought to ascertain the specifics of the teaching role in more detail.

As discussed earlier, the findings from my analysis of the tutor focus group data supported the development of the individual tutor interview questions used to generate the data for Phase Three and informed the remainder of the study.

The following chapter, Chapter Five, presents the first of the case studies, consisting of the results of my analysis of Mario's online transcripts collected in Phase Two. The findings of the analysis are supported by the data from the individual tutor interviews in Phase Three, which ascertain how Mario accounted for his discussion board postings and his teaching beliefs and practices.

CHAPTER FIVE

Case Study – Mario

The previous chapter outlined the results of Phase One of the study – the focus group interviews. The data from those interviews encapsulated some of the issues associated with being an online tutor within an undergraduate teaching degree, and supported the development of the individual tutor interview questions that complemented Phase Two and formed the basis of Phase Three.

In this chapter, I describe the results of my analysis of data from Phases Two and Three relating to Mario. I address the research questions, outlining, according to Mario's perspective, what it means to be an online tutor.

Mario's Profile

Mario was in his late twenties, the youngest and least experienced of the study group of four. He had come to tertiary teaching from the secondary sector, where he had taught for only two years. When planning his career on leaving school, he had initially followed parental advice.

My dad told me that I should do Commerce, and I agreed, and so when I graduated from school, I started doing a Commerce degree, and after a year I wasn't liking it. So I dropped out and then went back and tried it again, and then I dropped out again, and eventually I just dropped out indefinitely.

Deciding that commerce was not for him, Mario attended a session at a careers advice centre, where it was suggested that he should follow a career as either a parole officer or a teacher. Having studied and qualified as a teacher and then having worked in a low-socio economic school containing many children with behaviour problems, he joked that he sometimes felt that when he was in that role, he was parole officer and teacher combined. He speculated that that was why he had

enjoyed his teaching position there so much and why he felt he had been so successful as a teacher in that school.

When I interviewed Mario in early 2012 he was in his third year of teaching at the university. He had commenced as a sessional online tutor and was now on a three-year contract as unit coordinator. Although his expertise was in teaching information technology, at this time he was the coordinator of the educational psychology unit. As stated earlier, in 2011 this unit had 28 online learning groups of 75 students each, supported by 19 tutors, many of whom were involved in online teaching and learning for the first time. Part of Mario's role was to ensure that all tutors were supported in their teaching role, and were following all the policies and procedures of the university. Support for tutors was mainly offered through the online staff lounge, where tutors were also encouraged to provide peer support. This staff lounge was unavailable to students, so tutors were able to discuss and moderate assessments there before results were revealed to students. As well as coordinating this large unit, Mario was responsible for teaching one group of 75 students. As the father of a young child, Mario was happy to be able to work from home and arrange his hours around meeting his family. He had also recently begun postgraduate study, and admitted that he would not have been able to work, study and be available for his daughter with a "normal" teaching job.

Mario believed that "effective tutors demonstrate a genuine interest in learners, and a desire to help." He explained his philosophy of teaching as being heavily oriented towards student support, and described how this worked for him.

I may not be the best communicator or the best at a subject, but I think if the students sort of understand that you're really there to help, and that you want to help them, they're a lot more receptive to the help that you can offer and I've found that once you win them over that way, you know, you can always learn the content knowledge as you go.

Mario expressed a belief in the importance of relationships and how once he was able to “win them over” they would listen to everything that he had to say. This was the philosophy that had worked for him when teaching his sometimes non-compliant teenage students in his previous secondary school setting.

Mario’s Elements of Teaching Presence within COI

Learners and tutors were expected to contribute to each of the weekly topics using the discussion board. All Mario’s posts were inspected, classified according to the COI framework, and included in the analysis. Following my analysis of the discussion board data, Mario participated in a semi-structured interview so I could ascertain how he accounted for his postings.

Within the teaching presence aspect of COI are three elements that support student learning within an online environment. In line with the structures of the framework, the three elements examined were instructional design and organisation, facilitating reflection and discourse, and direct instruction. Over the twelve weeks of the online unit of study, students were asked to engage with twelve different topics. They were given study questions to discuss using the discussion board.

Table 5.1 shows the numbers of Mario’s and his students’ posts. The first column identifies the week of the unit and the topic the students were studying for that week. The table also shows how many students were active on the discussion board for each week, the percentage out of the group of 75, how many posts those students made, and identifies Mario’s posts related to the three elements of the COI.

Table 5.1
Mario's and his Students' Weekly Posts

Week Number and Topic	Number of active students	Total posts	Number of student posts	Number of Mario's posts	Instructional design and organisation	Facilitating reflection and discourse	Direct instruction
1- Professionalism	45 (60%)	210	198	12	0	9	3
2 - Cognitive development	25 (33%)	83	63	20	0	14	6
3 - Behaviourism	18 (24%)	69	39	30	0	18	12
4 - Cognitive learning	21 (28%)	53	38	15	0	9	6
5 - Constructing knowledge	19 (25%)	24	22	2	0	1	1
6 – Motivation	15 (20%)	33	31	2	0	2	0
7 - Classroom management	11 (15%)	23	13	10	0	8	2
8 – Diversity	8 (11%)	11	11	0	0	0	0
9 - Positive environments	10 (13%)	35	27	8	0	3	5
10 – Assessment	7 (9%)	15	13	2	0	2	0
11 – eLearning	8 (11%)	16	13	3	0	3	0
12 – Overview	5 (7%)	13	12	1	0	1	0
Total posts over the 12-week timeframe		585	480	105	0	70	35
Posts as percentages of total		100% of total posts	82% of total posts	18% of total posts	0% of total tutor posts	67% of total tutor posts	33% of total tutor posts

Figure 5.1 presents the same information in graphical form.

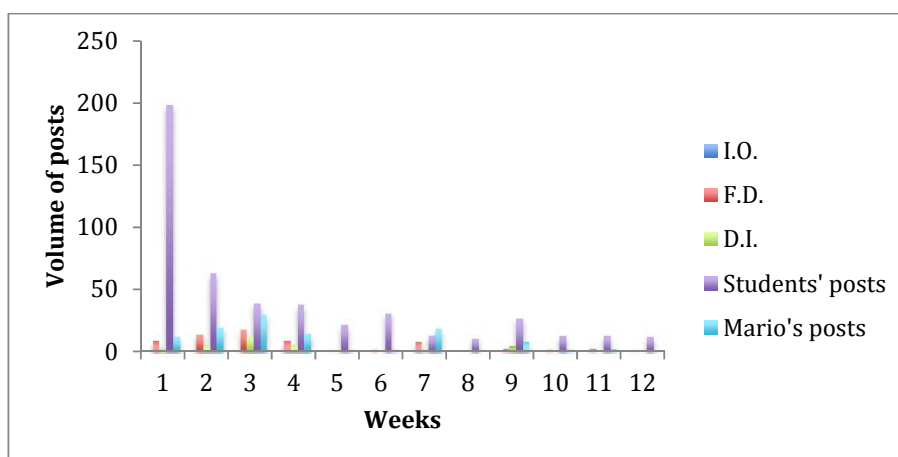


Figure 5.1. Mario's and his Students' Weekly Posts and the Three Elements of Teaching Presence – instructional design and organisation (I.O.), facilitating reflection and discourse (F.D.) and direct instruction (D.I.)

As can be identified in Table 5.1 and Figure 5.1, although there were 75 students enrolled in this group, the number of active participants was greatest in the first week of the study period.

In the second week the number of active students had almost halved, while Mario almost doubled his first-week post total. In week three Mario posted 30 times, but only 18 active students posted only 39 times. By week 12, the last of the unit, only five students were active, posting 12 times, with Mario responding once. Over the 12-week study period, Mario posted no threads defined as related to instructional design and organisation. He posted 70 posts classified in facilitating reflection and discourse category, and 35 in direct instruction.

Mario made almost half of all his posts in weeks two and three. One might have expected him to post most frequently in the first week, but as the coordinator of the unit, he saw his priority for this first week as being actively engaged in getting the unit up and running successfully for his large cohort of tutors; students were expected to be introducing themselves to one another and not necessarily needing his assistance.

Over the study period, students contributed 480 posts and Mario made 105, meaning that he contributed 18% of the total posts within his discussion board across the three elements. As identified, two thirds of Mario's posts were in the facilitating reflection and discourse element and one third in the direct instruction element. He did not post within the element of instructional design and organisation. In the remainder of the chapter I outline the results of my analysis with reference to Mario's discussion of these results (obtained through the follow-up interview) to answer my research questions.

Research Question One

What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

For the instructional design and organisation aspect of teaching presence, tutors would be expected to make posts that related to: setting of curriculum; designing methods; establishing time parameters; utilising the medium effectively; and making macro-level comments about course content. Mario had no posts that related to this element.

During his interview, Mario and I discussed the fact that he had no postings that related to instructional design and organisation. He felt that no opportunities had arisen, but also believed that tutor creation of their own materials was an impossible task. He emphasised that tutors were not always teaching in units for which they had any content knowledge, so would find it hard to obtain materials without the knowledge to ascertain whether what they were providing was accurate, relevant or up to date. Because this program was offered over four sessions each year, both tutors and students could be involved in teaching and learning for 52 weeks of the year. Mario felt that the volume of teaching drastically reduced the time available for preparation, and although tutors may want to have more of an active role in preparing and revising units, there was little or no opportunity to do so.

We have to remember, for some people (teaching staff), there's not even a day's break between semesters. So if you have all these ideas you can't really implement them because the start of the new semester is basically when you've just finished the two week marathon of marking and, you know, there's really no time - you just need a couple of days to then update your new Blackboard site in time for the new study period and then all you can really do is change the dates. That's about all you have the energy for at the end of a teaching period.

He explained that he had previously been able to be more involved before a study period began, and when he had taken that opportunity it had really made a difference to his teaching. He had some spare time before the start of that particular study period and was allowed to have some input, and explained that he had:

...gone ahead and found journal articles to add in that unit because (for that particular unit) there's no prescribed text and I had issues with that last time I coordinated it. Most of the students had sold their books and were complaining that they didn't have anything to read. And so, yeah, I'd taken the proactive step of actually getting them their resources and putting them in to sort of build on what was already given.

He indicated that he had found this opportunity had helped him in responding to students, particularly when working within a unit that was not within his area of expertise. He admitted that he much preferred to be working within a unit where he felt competent with the unit's content. He agreed that it was a "whole different ball game" when he knew the teaching topic, as he felt much more confident in providing resources. He described how he felt when he worked within technology units compared to an area in which he was not so knowledgeable.

Oh yeah. I can instantly see a need if technology is involved, you know, in the content, I can see what's missing and what would help. But in the other unit for example when it's say a professional practice unit, all about teaching philosophies and that, and that's where I'm not as experienced. And so finding resources was a lot harder. It took a lot more time because I didn't know what I was looking for. Whereas technology, I instantly know what terms to use, what to find, what to put in and how accurate it is.

Research Question Two

What proportion of the online discussion is characterised by teaching presence

examples of Facilitating Reflection and Discourse?

As identified in Table 5.1, 67% (70 of 105) of Mario's posts were categorised as being within the element of facilitating reflection and discourse.

This element is crucial to the teaching role. When Garrison et al. (2000) were conceptualising their framework, they originally named this element “building understanding” (Swan & Ice, 2010). Managing student discussion to support their understanding is an important aspect of teaching, whether on-campus or online, and requires commitment to ensure that there is cognitive development within a positive learning environment (Garrison, 2011). The instructor can review and comment upon student posts, raise questions and make observations that move discussions forward. The following table (5.2) describes Mario’s use of those strategies within his discussion board. It includes examples of Mario’s posts within the indicators of this element.

Table 5.2

Frequency of posts (Mario) – Facilitating Reflection and Discourse

Indicators	Frequency of posts	Example
Identifying areas of agreement/disagreement (2/1)	0	
Seeking to reach consensus or understanding (2/2)	0	
Encouraging, acknowledging or reinforcing student contribution (2/3)	62	<i>I like how you draw a connection between 'customers' and 'students'...I totally agree with you (week 1)</i>
Setting the climate for learning (2/4)	3	<i>You can comment whenever and wherever you like-there is really no right or wrong when asking a question (week 2)</i>
Drawing in participants, prompting discussion (2/5)	5	<i>I'd like to see if someone else can answer this question for Brooke (week 2)</i>
Assessing the efficacy of the process (2/6)	0	

Mario had 70 posts within the element of facilitating reflection and discourse. When I inspected the discussion board for this aspect of his teaching presence I found he had posts in three of six indicators, almost all related to *encouraging, acknowledging or reinforcing* student contributions. He had six posts that could be described as *drawing in participants to encourage discussion*. Mario’s final three posts relating to facilitating reflection and discussion were about *setting the climate for learning*.

When Mario shared his thoughts on his posts related to encouraging, acknowledging or reinforcing student contributions, he explained that he believed this aspect to be an “absolutely essential” component of teaching. He was a believer in the development of a sense of community and ensuring that students receive a quick response to any of their posts. As part of his postgraduate study, he admitted to

doing a lot of reading about this now, and what I've found with the instant, quick, encouraging replies is that it helps to establish the sense of community. You know, it lets them know that you're there, you're reading what they're writing and you value what they write and it - it tends to encourage participation and so I think you definitely do need to acknowledge each post, I think, that each student puts up. And then there is - there's definitely, like, more opportunity to build up on what they've said and get into more in-depth discussion.

This comment suggests that Mario understood a sense of community as being that the students had a sense that the tutor was there online viewing their work. He made no mention, however, of a community of learners engaging with one another, nor do I have any other evidence of his encouragement in that regard.

Because Mario had only three posts focusing on prompting discussion, I asked him to elaborate on any strategies that he had found successful in this area. He explained that he had been frustrated by isolated posts by students and felt a need to intervene. Noting that many of the posts were similar, he speculated that time-poor students did not want to waste their time reading identical posts. He provided another strategy for students.

I found that week one, week two, you get forty uploads of the exact same short answer replies. And no one's reading anyone else's work, they're just going through the motions and so I said OK, stop. Four things are already up there. If you agree with everything that's there, just say that you agree with what they've said. If you disagree, outline why, but try and develop what they said. Look for something that's missing. Try and build up on that discussion. And I found that it did - you know - the majority of that discussion actually engaged in that. There were some occasional ones that blindly kept uploading their work, but for the most part I think it did help them get a bit more engaged, at least with each other, because they're reading someone else's opinion. And then they're replying to that opinion. And again, it's all

about the sense of community, you know, if they start to act like you would in a face to face where you hear someone answer and you put up your hand and you say, "I disagree" or "I would like to clarify."

Once again, Mario's comments suggest that he was unclear about how to develop ongoing discussion with his first-year group. Although he stated that he tried a few times to encourage students to engage with one another, his comments suggest that if they agreed with what was said, there was no need for further discussion; only when there was disagreement should students have become involved. Throughout the interview, Mario referred several times to how it would work for him differently if he were teaching in an on-campus unit where it was easier to develop discussion.

I wondered whether many of Mario's students used email rather than the preferred discussion board conversations. Agreeing that this was not an option that he encouraged from his students, Mario asserted that he had set things up so that they would not need to use that avenue of support often. He had set out to anticipate any student issues before they arose. He explained how he had worked it out by initially clarifying where the problem areas were likely to be for students, feeling that when students were confused, they were more likely to email him for guidance. If the expectations were clear, then there was no need for students to contact him for assistance by email, meaning that he spent little time responding to students in this manner.

As discussed already, the volume of students who continued to engage dropped markedly throughout the unit. Mario was asked about the reduction in levels of engagement where students were either viewing the discussion board but not posting ("witness learners") (Bento et al., 2005), or where students were not participating because they were not monitoring the discussion board ("missing in action") (Bento et al., 2005). While Mario admitted that he had not really found a

solution for this, he suggested that the design of the units was a major contributor to the levels of participation and that it was not specific to this particular unit.

It seems to happen in every unit. Even in the unit where I've got specific tasks that scaffold assessments, you know, like the final assessment is in week ten and so in week nine they've done the last task to help them. And so after that they don't really see a value in participating.

The students had their final assessment in week 10 of the unit to ensure that all their work could be assessed and marked before the commencement of the next teaching period, which, as previously stated, followed straight on from the previous one, allowing students to be active for 52 weeks each year and enabling them to fast-track their degrees or to have flexibility as to how and when they studied.

Mario reported being unconcerned about this drop in participation, considering that online students were likely to have different study patterns to a typical on-campus student. He believed that for many of the students, studying was more about getting the qualification rather than being active in the experience. He admitted that he had not spent a lot of time trying to address the issue because he felt that

the type of person that chooses online learning is obviously busy or doesn't want the hassles of face to face. And so they just want to get in there, get their work done and their marks and move on to the next one and they want to progress through there until they get their degree.

Research Question Three

What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

As highlighted in Table 5.1, 33% (35 of 105) of Mario's posts were within this element of direct instruction.

For Garrison et al. (2000), direct instruction was contextualised as the instructor providing intellectual and scholarly leadership through the sharing of their subject matter knowledge with their students. Instructors have a role in diagnosing

comments for accurate understanding, injecting sources of information and moving the discussion in ways that scaffold learners to new levels of understanding.

Additionally, this element carries instructor responsibility in using a variety of feedback options, with explanatory feedback being crucial.

The following table (Table 5.3) shows how much of Mario's discussion was dedicated to these direct instruction posts and includes examples.

Table 5.3
Frequency of Posts Mario – Direct Instruction

Indicators	Frequency of posts	Examples
Present content/questions (3/1)	12	<i>I wonder though is the student voluntarily 'giving up' or is it just a learned response from past behaviour (week 3)</i>
Focus the discussion on specific issues (3/2)	0	
Summarise the discussion (3/3)	0	
Confirm understanding through explanatory feedback (3/4)	12	<i>I generally focused on the "whole class" for the start of the lesson and gave an overview of the concept with examples etc. and then assigned questions for all the students to complete. That way, the able students could work fairly autonomously through the problems. (week 4)</i>
Diagnose misconceptions (3/5)	11	<i>If you were to do an experiment with a three-year-old child that was targeted way beyond their current stage of development, the child may not yet be at a place where they will be able to understand the lesson. No matter how many times you repeat it (week 2)</i>
Inject knowledge from additional sources (3/6)	0	
Responding to technical concerns (3/7)	0	

A third of Mario's posts related to direct instruction, and as indicated in Table 5.3, Mario had 35 posts within this element. I identified indicators in three out of the seven elements. Twelve of Mario's direct instruction posts were in the category of *presenting content or questions*, 12 were *confirmatory feedback* posts and 11 were *clarifying misconceptions*.

Direct instruction is most often associated with specific content issues, and Mario identified throughout his interview that the content of this unit was not within his particular area of expertise and that when he did have specific content knowledge

(as in other units) he felt much more confident. This could explain why there were no additional content or resources provided within his discussion board.

Although Mario had previously described his role as being one of daily support, he expanded on this by stating that he believed that, in some online learning units, too many students “actually get too much help to complete university assignments.” He explained his thinking by linking back to his conversation about emails. For Mario, it was all about clarity and not requiring students to search for answers in multiple places. He explained that he was not suggesting that he should give them less help; rather he thought it better to have the help in one easy-to-access place. He felt that giving students too much information in too many places was not effective support; it actually gave students more work to do and left them less time to digest the materials in useful ways. He explained how he had tried to make it clearer for students.

... where there were four or five different sources of information for one assignment, I think I simplified it a lot by giving them a lot less guidance. So that's one way of looking at it. So they were given too much guidance and when I took that away, that guidance, they coped a lot better.

He felt very strongly about the availability of materials, and discussed this in detail with me, stating that in many cases “too much information is given to students in the first instance.” He felt that “there’s a whole lot of stuff being thrown at them and they’re being told to just ‘well everything’s there, figure it out’.” Within this teaching unit, all the materials were made available for students as soon as they were able to log in to the course. Mario was not convinced that this was the best model; he felt that a more appropriate model would be to introduce students to materials in “dribs and drabs.” He thought that students should be “scaffolded” through their learning over a week or two then moved on to the next level. He had felt a need to make things simpler and more streamlined for students. He also explained that if we

were trying to encourage students to behave as if they were in an on-campus tutorial group, then it would make more sense for each week to be taken independently with the whole group involved in the activities for that particular week, suggesting once again that he believed that the model should follow the format of an on-campus class held online.

Mario explained that he believed some students, who struggled with the materials and passing assignments, needed more skills-building activities over the life of the unit. It is important to note that this unit was a first-year unit and, significantly, one that had open access for students who could be taking part in the study with few educational skills. It could also be the first unit that many students had studied at university level, and as such, Mario considered that it should contain more activities related to the skills required for university writing and thinking. He felt that students were being assessed on this without having been taught what was required. He would like to have seen more building of skills each week so that “what they do in week one will apply directly into the assignment. And what they do in week two will as well and so on.” He felt that this approach had more potential than the existing approach to support continuous engagement.

Several indicators within this aspect of the teaching role were not at all evident in Mario’s online teaching presence. One of those missing indicators was *summarise the discussion*. Within this online course, many of the tutors had a strategy that involved scanning each of the week’s discussions and giving students an overview of that week to support their learning and to ensure that they were on the right track. When asked if he had tried giving students an overall summary each week of the types of conversations and ideas that the group had, and whether that was a useful strategy, he responded that he had not found this to be a helpful process

for the majority of students. Although expressing a belief in building collaborative learning communities, Mario told me that online, he tended to work with students on an individual basis on the discussion board.

Working on the discussion board tasks, sometimes I suggest other things to do and then I just leave them to it and when they come up with something, I have a look and I give a bit of feedback on it and I move on to the next student.

He explained that he preferred to do it this way rather than scanning the discussion board throughout the week and giving overall feedback.

I prefer that rather than looking at thirty things, not saying which is good and which is bad until the Friday and then doing up the summary. You know, I prefer to give each student individual feedback for each thing that they do.

He felt that this “formative feedback” to individual students was much more valuable and encouraged independence. Note here that although Mario stated his preference for individual feedback to each of his students, his posts totaled only 105 for the 12 weeks of the study period.

I don't like doing summarising and I don't think I've ever done that, just because it's already on the discussion board. And maybe there's value for students that don't read everything, just have one summary of what's happened for that week and what we've discussed.

Although previously speculating that many students were time-poor and therefore tried to find the quickest route to information, Mario also noted that he was anxious that this scanning of the discussion board could encourage students to be “lazy”, and to not read the whole discussion but rather take a short cut and read only the weekly summary.

Highlighting once again his desire for greater control of the unit, Mario would have much preferred to keep students locked into a week-by-week involvement throughout the teaching period. He explained that many students appeared to log on and get going with the tasks and activities on an individual basis,

often working several weeks ahead and posting into discussion boards well into the unit's time frame. He described something he had tried as a method of supporting students when teaching in this same unit in a previous iteration (solely as a tutor rather than in the unit coordinator role). He had chosen to block student access to the later weeks of the unit and only released access to content and activities gradually to students over the course of the teaching period. He explained his motives for this change as being that "new" students were anxious when they saw "veteran" students working six weeks ahead. Students had contacted him because they were "concerned that they were falling behind, when in fact they were doing exactly what they should be doing."

Mario had implemented this new course design in his own student groups, but this had displeased his unit coordinator. She had informed him that he was not allowed to "hide" materials from students. He had been told that because the university advertised the course as being flexible, students had to have access to the full teaching period to allow them to pick and choose how and when they wanted to study. Mario had to re-release all the materials. He did try a work-around for this process and had decided to ensure that students were really clear about the support that was available. He explained that he had to

sort of take a step back. I make it clear that at the start of each semester that I don't read ahead. So if we're in week two, and someone puts up a question in week three, I don't read that until week three. You know, and on Monday I'll read it, but I make it clear that my mind is going to be in the week that we're in and I hope that their mind is too. And if they choose to work ahead, they're welcome. But, you know, it probably won't benefit them because they'll be getting feedback maybe two or three weeks after they've done the work and by that stage they've probably forgotten what they've done.

This approach suggests that, although he was working online, he continued to be influenced by his face-to-face experiences and practices of teaching and learning

within a model where the tutor is in control of transmitting the required pieces of information.

Research Question Four

Which teaching presence components do tutors believe are important in supporting learning?

Mario expressed a belief that online teaching was different from face-to-face teaching and that online teaching required being actively involved with students on a daily basis. Mario believed there were distinct differences between online and on-campus environments, with the online students having much more of an expectation of time commitment from their online tutors. He believed that regular communication with his students was of paramount importance. This was one area that he felt to be quite different from an on-campus teaching role, in that “the face-to-face reality is that you come in for two hours a week and once the class finishes you don’t hear from them until seven days’ time when they come up to your class again.” He compared this to the online teaching role, where he believed that students have different expectations of their tutors than they would have for an on-campus member of staff. He thought that this was because online students operated with “some sort of independence,” but with tutor guidance. He believed that students required immediate feedback to avoid feelings of isolation and concern, feeling that

online tutors need to understand that their online students need immediacy with their answers because they’re on their own, they’re not sure if they’re right or wrong, and they’re just going to get more and more anxious as the days go on if they don’t get answers to their questions or if they don’t have their problem solved with some sort of immediacy.

Mario believed that his previous role as a secondary schoolteacher had given him the experience and practice in teaching that were most conducive to the online role. For him, secondary schoolteachers were more likely to encourage independence

in their students, and he expected his students to be autonomous in their approach to learning but with continued confirmatory feedback from their tutor that they were on the right track.

I was interested to know how difficult this immediacy was to implement with large numbers of students. To support the potential for useful feedback, within this unit and others, some tutors used a strategy of dividing their regulation cohort of 75 into smaller groups. When I questioned Mario about the average group cohort size of 75 students and whether he had ever felt the need to divide the larger cohort into smaller groups, he replied that he had not had to do that because “the students can basically act as if they’re in five different groups.” He felt that because students were working in different time zones and under a range of conditions, they were choosing to work and engage at different times.

Because if I check daily, you know, in a group of seventy five, ten of them might do their work on a Monday, ten of them might do their work on a Tuesday, and so I just try and attack them all each day and try to knock that off. I basically - I think the way I approach them does bunch them into smaller groups.

However, Mario admitted that these students were not really engaging as separate groups, rather most of the posts were either individual postings or with one other person.

Mario was asked to identify the teaching and strategies he felt were successful. He believed that students benefited from his sharing of his own school teaching practices. He used anecdotes from his own teaching experiences to illustrate that this

opened up opportunities for them to apply it to their experiences, you know, even if they were a swimming coach, or if they were, you know, just as a parent, what strategies they’ve used to discipline their children or to teach them something. So I think it - if you shift it from the text into an actual real world context... the transfer of knowledge sort of helps solidify the understanding.

Following this line of thought, Mario asserted that learning occurred “when we form new and useful ideas that help us make sense of things.” He expanded on this by saying “I think there’s no point having an idea - understanding, if you don’t understand the bigger picture.” He referred to some of the content of the unit to expand on his view:

What is the point of knowing that if you ring a bell and a dog salivates, you know, you’re not going to ring a bell in class and make your kids start drooling. But you know, what’s the bigger picture? How can that translate into as far as your teaching behaviour? You know, it’s the ability to transfer the concepts into other contexts, I think, that’s when you’ve actually learnt something.

Mario explained that he felt that in his role as schoolteacher he had to try to make relevant connections for students. He went on:

I go back and try and put in anecdotes of, for example, “when I was teaching here, this is...” and I give the story of how that relates to the weekly topic. And I think that may help them see it like, not as text theory. They’ll see it as real-life occurrence which may get them thinking about how they could apply that knowledge.

Mario felt that he was using the same skills as he had used in high school when he was teaching Maths and “had to use real life down to earth examples of everything I taught.” He explained that he taught “in terms of driving a car, or playing football.” He felt that he had continued with that model.

... so I think I’ve brought that with me and so I think during the process of teaching, it’s all about helping students learn something but also recognise that they’ve already been doing elements of what they’re learning. You know, like adding, subtracting, how they behave, how they make other people behave better... so you’re making them bring their awareness to that and then building on it. Saying hey, you can take it a step further now and give them a little bit more. And so it helps shape them, changes their opinions a little bit, and... yeah, just developing them.

Research Question Five

Which factors impact on tutors' ability to provide a visible online teaching presence?

The biggest issue for Mario in providing a visual presence related to his belief in the development of community with his students. Although in his professional readings the building of communities was identified to be a crucial aspect of online learning, Mario admitted that he had not found this community building to be all “plain sailing.” Although he felt that he was working hard to create a community, he had a notion that it was a rather one-sided process, feeling that “sometimes it falls on deaf ears. They may just put up their answer and they may just want to know if they’re right or wrong, not how they could further expand it or how else they could consider it.” He repeated his thoughts that for many of his students the focus was on their final result, meaning that there was a great concentration on the assessments, on how they would be assessed and if they were on the right track to pass the unit. Suggesting that students were not there to develop their skills or learning in any deep and meaningful way, Mario felt that within the tutorial board discussion, “they’re sort of just looking for reinforcement more than developing expertise.”

Mario also believed that there was a cohort of students who were just not ready for the learning style and expectations of university study and that too many students were happy to sit back and let someone provide them with information. He stated that many students asked questions that made him wonder and want to ask them “do you understand where you are?” He considered that “some of the questions they ask, they just seem so low level or irrelevant that you just want to say, surely you could just use your initiative?”

Believing that the online study option really hinged on competence in technology use, Mario explained that the technology held some students back and many struggled with the best way of asking for help. He wondered whether some students thought they were the only ones struggling and did not want to appear as if they were not coping. Technological problems would not greatly affect an on-campus class, but Mario believed that those students who were struggling and needing support would be much more obvious to the tutor in a classroom situation and it would be much easier to step in and help. He felt that there was a real danger that the students who struggled online were much more likely to disappear because

you can't read their cues, like what they're looking like, like if they look confused or if they look really motivated. You don't know what they're thinking or what they're doing and so, you know, how do you know if the student's not really getting the content or not really engaged, you really want them to just email you and say, "Look, I'm finding this really confusing/boring/stupid," whatever, just so you can, you know, start the conversation.

Mario noted that the unit's tutors had vastly different qualifications and teaching backgrounds. He had observed differences between how schoolteachers who normally worked with younger children, such as early childhood or primary schoolteachers, and those with a secondary schoolteacher background behaved with their students. He felt that secondary schoolteachers were more used to encouraging independence, whereas perhaps primary or early childhood teachers were more inclined to "spoon feed" their students.

A lot of tutors, I think, feed in on that and I think because they are early childhood or primary teachers, they've taken their experiences with them. Whereas, because I'm a secondary teacher, so I expect students to be fairly autonomous. Whereas a lot of the tutors seem to have discussion board sections for, like, referencing queries, and help with certain things. They've got fifty different places for students to go for help when I think why aren't the students taking the initiative and figuring it out for themselves and why are you helping them when there's guides already? You know, the library has guides, Blackboard has its own frequently asked questions and sections, you know, there's... and YouTube, you can search for anything on YouTube and it

will show you videos on how to do anything. Like, I learnt how to change the washer in my bath over YouTube... you know, you can find anything if you put in the genuine effort and I think the students that are learning online need to understand that they can find solutions in their learning if they actually just look.

Discussion of Mario's Beliefs and Teaching Presence

This chapter presented a case study of Mario, one of the four intensively-studied tutors, and his online discussion board participation. The chapter concludes with a brief overview of Mario's case as it relates to the research questions.

Research Question One: What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

Mario had no posts relating to instructional design and organisation. Remembering that Mario's qualifications are in information technology, and that he was the only tutor of the four case study participants employed full-time, this was surprising. However, Mario justified his lack of posts in this area by explaining that time schedules impacted on his ability to have any impact in this element.

It should be noted that tutors were not expected to be part of the design and organisation of the course or its individual units. All of the content, resources and student activities were designed by on-campus members of staff to match the on-campus iteration of the course. In addition to there being no expectation for his involvement in this element of teaching presence, he also believed that there was not enough time to do this effectively, particularly if the tutor is involved in teaching one unit in one teaching period and then starting in another teaching period with a new unit the following week. Nevertheless, Mario had been involved in this area of teaching through scaffolding student learning by ensuring that materials were clear and comprehensible.

Research Question Two: What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

Nearly two-thirds of Mario's posts were within the second element of facilitating reflection and discourse. Although there are six different indicators within this element, most of Mario's posts were identified as encouraging or acknowledging student contributions. He believed that it was important to have regular communication with his students, as they were likely to need continuous and immediate reassurance from their tutor. Although expressing a belief in developing a community of practice among his students, and although this course was designed to be interactive and students were encouraged to learn with and from one another, Mario believed that most students operated independently, only checking in with the tutor for clarification or confirmation that they were on the right track. He clearly believed that many students had a strong focus on passing the unit, rather than on any deep learning.

Research Question Three: What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

Around a third of Mario's posts were within the direct instruction element, and were divided almost equally across three out of the seven indicators – presenting content or questions, giving explanatory feedback, and diagnosing misconceptions. These figures confirm Mario's belief that students learned independently and required tutors to be a source of confirmation and clarification. He expressed a belief in being very specific with students – teach them how to do something, let them practise it, and then redo it in an assessment to demonstrate competence. He believed that each of the units should operate in that manner, gradually building up student skills and expertise over the life of the unit. However, he did not think that his

students should be able to work their way through the weeks ahead of schedule as he believed that they needed reassurance that they were on the right track, and could not obtain that if they were working ahead of schedule and without tutor presence or feedback, suggesting that while he encouraged independence, he believed the teaching role to be one of control of what and how students learn.

Research Question Four: Which teaching components do tutors believe are important in supporting learning?

Mario expressed a belief in regular engagement with his students within a learning community. However, throughout his interview he referred to independence and individual student engagement. He believed in immediate responses to students who he simultaneously expected to demonstrate autonomy in their learning. He contended that units should be streamlined to allow clarity for students who were often confused by information being placed in too many places; this clarity, he felt, encouraged students to work without having to contact the tutor by email. He also believed that activities needed to be authentic if students are to understand, and was an advocate of making links to students' present knowledge and by referring to his own school teaching practices. He felt that this assisted them to make sense of the new information.

Research Question Five: Which factors impact on tutors' ability to provide a visible online teaching presence?

Mario admitted to struggling to develop interactive communities within his discussion board. He attributed this to the ways that many students operated within the online learning environment. Believing that they were not particularly interested in deep learning, he felt that their focus was on completing the unit successfully in order to obtain a teaching qualification. He saw the tutor's role as being one of

support and reinforcement rather than in developing critical thinking in his students. He also believed that many of his students took little initiative and responsibility for their own learning. He found it difficult to ascertain which students were struggling and was anxious that those students could disappear without anyone realising that they had needed help. He believed that his secondary teaching background of two years supported his students' independence and that tutors without this background were in danger of over-servicing their students.

As previously mentioned, despite being the coordinator of the unit, Mario was the youngest and least experienced tutor. He was the only case study tutor with a full-time role within the university. Because he worked online he was only required to attend the university for a weekly meeting, and otherwise fulfilled his role from home. The role of unit coordinator has been identified as a leadership role within universities, but it is generally held by an academic with strong content expertise of the subject. Debowski and Blake (2004) defined teaching leadership as “where an individual seeks to influence the teaching practice of others” (p. 2). When Roberts, Brooker and Butcher (2011) investigated the role of unit coordinators across Australian universities, they found that as a minimum standard, the unit coordinator is responsible for managing and coordinating a unit of study, the students enrolled in that unit and the sessional staff teaching within the unit. As the person in charge of the unit, the unit coordinator is responsible for setting the example for teaching practice, developing and refining units, maintaining unit quality and disciplinary integrity. Although Mario had little expertise or experience in this area, the unit had been developed for face-to-face presentation by an on-campus member of staff who did. It had then been re-developed by an online member of the teaching staff who was more familiar with the requirements of online learning.

Mario had no unit coordinator experience, content (educational psychology) expertise, or primary teaching expertise prior to taking this unit. Nor did he have any input into the developing or refining of this unit. Therefore, it was not surprising that he felt out of his depth at times. He admitted to having no knowledge of this area of the curriculum and that he had not covered much of this material in his teaching degree. He was loath to identify his age and experience to his students or his fellow tutors, and he would much have preferred to be working within a unit where his content knowledge was much stronger and where he could find and create resources that he knew would be accurate and current. However, he did have the most recent classroom experience of the study group. He was the only one involved in postgraduate study, allowing him to access information about online teaching and learning. He was particularly interested in communities of practice and had given this a great deal of thought in relation to his teaching and to the teaching of the tutors in this unit. He was also an advocate for open-source materials to support learning.

The way that Mario dealt with lack of experience within the unit was to keep a tight rein on his teaching team and his students. In common with Berge's (1995) categories of roles in online teaching, Mario had adopted a managerial role in which he saw himself as providing objectives, setting guidelines and defining rules and roles. He did not share any personal information with his students and had not posted a photograph of himself as many other tutors had, stating that he felt that he would lose his credibility if people realised how young and inexperienced he was. This also meant that he had chosen not to build up too close a relationship with students, believing that it was important to maintain a professional profile.

He tried to anticipate questions and tended to respond to students individually. Although specifying that he believed in the development of a

community of practice, he seemed to be unclear as to how to support one, stating that students were more interested in achieving a qualification rather than the learning along the way.

Summary of Chapter

This chapter provided the results from Phases Two and Three, outlining, according to Mario's perspective, what it means to be an online tutor. The following chapter, Chapter Six, performs the same role with respect to Leanne, the second of the case study participants.

CHAPTER SIX

Case Study – Leanne

The previous chapter provided the data and analysis from Phases Two and Three that address the research questions, outlining, according to Mario's perspective, what it means to be an online tutor. This chapter, Chapter Six, performs the same role for Leanne, the second case study tutor.

Leanne's Profile

Leanne had the most classroom teaching experience and the highest qualifications of the four intensively-studied tutors. She grew up in a farming community in regional Western Australia and was advised by her mother to choose nursing or teaching. Knowing that she did not want to be a nurse, she chose primary teaching; she commenced her study in the early 1980s and worked for over 20 years in the classroom. She has a PhD in psychology. In mid 2011 Leanne returned from living overseas for two years. She had been able to continue her online work while away despite being immersed in a different culture and way of living. The family had returned to Australia when her daughter enrolled for university study.

Employed as a part-time, off-campus, sessional tutor, this was the fourth time that Leanne had worked in this particular educational psychology unit. It was the only unit in which she had online or tertiary teaching experience. She had, however, completed some of her postgraduate study as an online student, and felt that this gave her some understanding of the student experience. She felt very confident of her background knowledge in this area, particularly because of her psychology PhD.

Leanne had been asked to coordinate one of the online units, but felt that this was too great a time commitment. During this research, Leanne was responsible for teaching one group of 75 students. Additionally, she was the owner/director of an

online business. She expressed pleasure in being able to work flexibly in both her teaching positions, with neither position impacting on the other.

Leanne believed that effective tutors were “patient, non-judgmental and reflective.” She felt that tutors should always be asking themselves, “What can I do differently to help this particular student?” Additionally, she expressed a belief in tutors being “innovative and committed” whilst demonstrating both “content and pedagogical knowledge.”

Leanne’s Elements of Teaching Presence within COI

Within the teaching presence aspect of COI are three elements that support student learning within an online environment. In line with the structures of the framework, the three elements examined were instructional design and organisation, facilitating reflection and discourse, and direct instruction. All Leanne’s posts were inspected, classified according to the COI framework, and included in the analysis. Following my analysis of the discussion board data, Leanne participated in a semi-structured interview so I could ascertain how she accounted for her postings.

The following Table 6.1 shows the numbers of Leanne’s and her students’ posts. The first column identifies the week of the unit and the topic the students were studying for that week. The table also shows how many students were active on the discussion board for each week, the percentage out of the group of 75, how many posts those students made, and identifies Leanne’s posts related to the three elements of the COI.

Table 6.1
Leanne and her Students' Weekly Posts

	Number of active students	Total posts	Number of student posts	Number of Leanne's posts	Instructional Design and Organisation	Facilitating Reflection and Discourse	Direct Instruction
1- Professionalism	36 (48%)	82	65	17	3	6	8
2 - Cognitive Development	28 (37%)	85	4	41	0	21	20
3 – Behaviourism	25 (33%)	97	75	22	0	9	13
4 - Cognitive Learning	13 (17%)	56	27	29	0	11	18
5 - Constructing Knowledge	13 (17%)	18	14	4	0	1	3
6 – Motivation	11 (15%)	28	17	11	0	6	5
7 - Classroom Management	13 (17%)	52	31	21	0	11	10
8 – Diversity	10 (13%)	24	14	10	0	5	5
9 - Positive Environments	0	0	0	0	0	0	0
10 – Assessment	0	0	0	0	0	0	0
11 – eLearning	5 (7%)	7	5	2	0	2	0
12 – Overview	0	0	0	0	0	0	0
Total posts over the 12-week timeframe		449	292	157	3	72	82
Posts as percentages of the total posts		100% of total posts	65% of total posts	35% of total posts	2% of total tutor posts	46% of total tutor posts	52% of total tutor posts

It should be noted that another research project overlapped with mine and affected this unit. Neither Leanne nor her students were expected to post within the discussion board in Weeks nine and ten, as the students were encouraged to blog during this period. They were given two different questions to discuss related to the topics in those weeks and were encouraged to post to a separate blogging site. Although the tutors had access to these sites, the students were de-identified, meaning that it was not possible for tutors to ascertain whether those students who were active within the discussion board were also active bloggers. This meant that I collected no data for weeks nine and ten, and this might have reduced the following two weeks' posts as well.

Figure 6.1 presents the same information as Table 6.1 in graphical form.

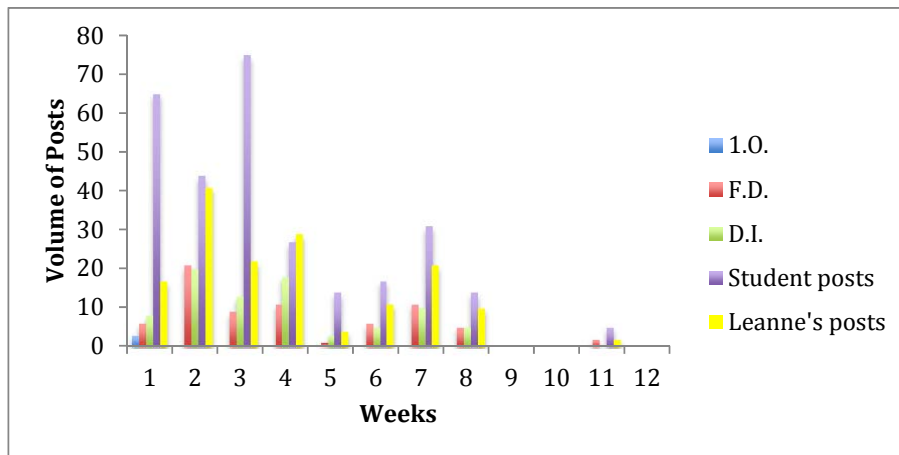


Figure 6.1. Leanne's and her Students' Weekly Posts and the Three Elements of Teaching Presence – I.O. – instructional design and organisation; F.D. – facilitating reflection and discourse; D.I. – direct instruction

Although there were 75 students in this group, the number of active participants was greatest in the first week (Table 6.1). However, the largest number of posts was made in week three, with 25 students making 75 posts and Leanne posting 22 times. In week four, Leanne posted more often than her students. Numbers dwindled steadily until in week eleven only five students posted five posts and Leanne posted twice. In the last week of the unit, neither Leanne nor her students posted. Over the 12 week teaching period, within her discussion board, Leanne had three posts relating to instructional design and organisation, with the vast majority nearly evenly split between facilitating discourse and direct instruction.

Leanne posted most often in week two, almost matching her students' total. One might have expected more than 17 posts in Leanne's first week, although it should be noted that tutors were encouraged to allow students to socialise in the first week to develop confidence in engaging with their peers.

Over the study period, students made 292 posts and Leanne 157, meaning that she contributed 35% of the total posts within her discussion board across the

three elements. Two per cent of Leanne's posts were in instructional design and organisation; 46% were in facilitating reflection and discourse; and 52% were in direct instruction.

The remainder of the chapter outlines my analysis of my and Leanne's discussion of the results to answer the research questions.

Research Question One

What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

As mentioned above, 2% (3 of 157) of Leanne's posts were within the instructional design and organisation element of the COI framework. Table 6.2 shows these indicators and the frequencies of the associated posts. The comments used as examples were made by Leanne on her individual discussion boards.

Table 6.2
Frequency of posts (Leanne) – Instructional Design and Organisation

Indicators	Frequency of posts	Example
Setting Curriculum (1/1)	2	<i>If you have any questions regarding this unit, including navigating around this site, please do not hesitate to ask. As the saying goes, "There is no such thing as a silly question!" (week 1)</i>
Designing methods (1/2)	0	
Establishing time parameters (1/3)	0	
Utilising medium effectively (1/4)	0	
Establishing netiquette (1/5)	0	
Making macro-level comments about course content (1/6)	1	<i>If you are completely new to online study, then you may be feeling a little overwhelmed. This is completely normal! I know that it can sometimes feel that you are completely alone, and that everybody else knows what they are doing. However, I can guarantee that there are many students who find the whole process rather challenging. You are definitely not alone, there is a lot of help and support available to you. So, take it slowly, and don't expect to understand everything straight away (week 1)</i>

As indicated in Table 6.2, Leanne had three posts within this element. As highlighted in Chapter Five, this element of teaching presence involves tutors making posts related to: setting of curriculum; designing methods; establishing time

parameters; utilising the medium effectively; and making macro-level comments about course content. As noted in Mario's case study (Chapter Five), it was expected that few posts would relate to instructional organization. This was not a university expectation from the role of a sessional tutor. Leanne's three posts were all in the first week of the unit, and offered support to students who were likely to be feeling anxious.

Leanne noted that some students lacked understanding of what was expected from them, and explained that she had used these posts to ensure that students felt supported in this new environment.

Research Question Two

What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

As identified in Table 6.1, 46% (72 of 157) of Leanne's posts were categorised as within this element of the COI framework.

Again, as previously outlined in Chapter 5 (Case study Mario), this element could be thought of as being front and centre of the teaching role and was originally named as "Building Understanding" (Swan & Ice, 2010). The managing of student discussion to support understanding is an important aspect of teaching whether on campus or online and requires commitment to ensure that there is cognitive development within a positive learning environment. The instructor might be expected to review and comment upon student posts, raise questions and make observations that move discussions forward. As identified nearly half of all of Leanne's posts were in this area of teaching presence.

The following table (Table 6.3) identifies the classification of each of the indicators and the volume of posts according to each of those indicators for Leanne.

It includes examples of Leanne's posts within the indicators of this element

Table 6.3

Frequency of Posts (Leanne) – Facilitating Reflection & Discourse

Indicators	Frequency of posts	Example
Identifying areas of agreement/disagreement (2/1)	1	<i>Hi Belinda. I agree with you 100% as I was hoping that someone would come up with this argument. (week 7)</i>
Seeking to reach consensus or understanding (2/2)	1	<i>Did Suzanne actually understand what she was doing? Read the next part of this scenario. (week 5)</i>
Encouraging, acknowledging or reinforcing student contribution (2/3)	33	<i>Hi Leah. This is a great start to the discussion. I'm hoping that others will deepen this discussion with reference to the text to support the argument. (week 2)</i>
Setting the climate for learning (2/4)	5	<i>This is great – There is a real sense of discussion starting to emerge with people considering other people's posts. (week 1)</i>
Drawing in participants, prompting discussion (2/5)	32	<i>Hi Tansy, a great start to the discussion. Can anyone think of a situation that involves being a professional but is not covered by being respectful, considerate or committed? (week 1)</i>
Assessing the efficacy of the process (2/6)	0	

As indicated in Table 6.1, Leanne had a total 72 posts within the element of Facilitating Reflection and Discourse. When her discussion board was analysed for this aspect of her teaching presence, she demonstrated a wide range, having posts across five out of the six indicators. However, her key focus was demonstrated in two main indicators - *encouraging and reinforcing student contributions* (33 posts), and *drawing in participants* to become involved in the discussion (32 posts). Leanne was an advocate of reflection, feeling it to be an essential part of the job in a continual effort to improve and develop.

I think it's always good to sit back and think about what you're doing. I think that as a teacher, I'm constantly reflecting on what I do, how I can improve, make it better. Because you're never perfect, are you?

It is interesting to note that while Leanne believed that reflection was an essential aspect of who she was, believing it to be an essential tutor attribute, it also impacted on her teaching of her students where she had 72 posts in this area overall,

suggesting that she also believed it to be a crucial aspect to develop in her pre-service teacher students.

Expanding on how she actually addressed this facilitating discourse aspect of her teaching presence, Leanne further explained how she tried to address student needs. She described her overall aim as being “to provide students with the level of support that they require, to be able to do as well as they possibly can.” She felt that she “had done that to the best of (her) ability.” She expressed a belief in learning as being a two-part process where students are supported in accessing “knowledge” but then they “have to be able to apply that knowledge” to demonstrate that they have learned. She felt that perhaps it was not so important for students to build up a large knowledge base – rather it was more important to know what to do with that information. Her view was that when students are asked to search for information to support their learning, they have to make decisions about whether the source is not only relevant but also if the source is credible. Leanne stated that she had created resources that had supported the feedback process rather than actual teaching resources and that she had built up a “bit of a database in terms of referring students to relevant journal articles and so on.” She felt that there was a need to explicitly teach those research skills. She did identify, however, that she had not felt it within her remit to “train students on how to actually access and make appropriate use of additional learning materials.”

Because a large part of Leanne’s involvement on the discussion board related to encouraging discussion and trying to get students engaging with one another, it was relevant to explore how successful she considered her strategies in this area were in getting students to actually interact with one another.

She explained that there were many students who were working independently through the materials without engaging with other students. Those students tended to post questions for her response and were not that interested in what other students had posted. She felt that everyone “just posts their own thing. Nobody reads anything other than their own posts.” She felt justified in this comment because she had noted that “you can have exactly the same question asked, in terms of requests for help that you’ve already answered. And you go, well, didn’t you read anyone else’s posts? The answer’s there!”

Research Question Three

What proportion of the online discussion is characterised by teaching presence examples of Direct Instruction?

As identified in Figure 6.1 Leanne demonstrated 52% (82 posts out of a total of 157 posts) of her posts being within this element. As highlighted in Chapter Five (for Mario), the element of direct instruction is contextualised as the sharing of subject matter knowledge with students by instructors who provide intellectual and scholarly leadership. Part of the role is to ensure that students have accurate understanding, inject additional information to develop this, and develop the discussion to move forward to support new levels of understanding. Explanatory feedback is a crucial aspect of the students’ development.

The following table (Table 6.7) identifies the classification of each of the indicators within the element of direct instruction, and includes the volume of posts according to each of those indicators for Leanne. It includes examples of Leanne’s posts within the indicators of this element.

Table 6.4

Frequency of posts (Leanne) – Direct Instruction

Indicators	Frequency of posts	Examples
Present content/questions (3/1)	37	<i>Hi Leah, could you explain why you think there has been proactive interference? What previous learning in particular may be interfering with her ability to learn the lines for a play in one night just by her Dad reading them to her? (week 4)</i>
Focus the discussion on specific issues (3/2)	6	<i>Although you may be able to have a say in the seating arrangement, it could be possible that you may have a 'crowded classroom' over which you will have no control. (week 7)</i>
Summarise the discussion (3/3)	3	<i>This task is by far not appropriate nor is it an efficient way of learning material or content. This is due to the fact that students' learning will not be meaningful (Eggen & Kauchak, 2010). ...Furthermore, by having a meaningful understanding of these words, it will ensure that the words and their meanings are committed to students' long term memory. (week 4)</i>
Confirm understanding through explanatory feedback (3/4)	14	<i>Hi Roxanne – it is FANTASTIC to see you supporting your argument with reference to an academic journal outside of your text. Well done! I hope other students will be able to find some other relevant journal articles to contribute to the discussion. (week 4)</i>
Diagnose misconceptions (3/5)	15	<i>Hi Sumera. I've added where you need references in your first few points below. (week 7)</i>
Inject knowledge from additional sources (3/6)	2	<i>My honours thesis looked at collaborative learning. The results showed that the only students who benefited were those who were paired with a more knowledgeable partner. It is worthwhile to keep this in mind, because other than providing positive self-esteem benefits, the more knowledgeable partner in actually not developing their own learning. (week 2)</i>
Responding to technical concerns (3/7)	5	<i>Hi Akram. If you are referring to the submission of your journal, this is not handed in until August and they are all submitted at the one time along with part B. (week 2)</i>

Leanne had 82 posts that were considered to be Direct Instruction comments within her online discussion board, with posts in all seven of the indicators. However, the largest proportion (37 posts, 45% of posts for this element) was in presenting content or related questions. Although it all the information that students required was contained within unit materials that included an online text, video clips, journal references and so on, Leanne had provided a variety of extra readings for students. However, she admitted that she had “no idea if this was successful in supporting learning.” She found it interesting that “within student evaluation feedback students will say that they interacted with the information posted on the board and were appreciative of the extra information even though they were not active participators themselves.” She wondered if they were still able to learn from the materials without interacting on the discussion board.

Expressing a concern around student commitment to the learning process, Leanne also expressed frustration with some students who talked about wanting to succeed but did not appear to be willing to put in much effort to do so. She explained that many students say that “this has been my passion for years and I’ll be devastated if I don’t pass!” She admitted that she felt like responding “but, you haven’t done anything. You haven’t posted on the board, and you haven’t taken notice of any of my feedback. How on earth do you expect to succeed?” She felt that for some students she was actually wasting her time on giving feedback. She explained that “at times, I think students don’t pay any attention to it because they make exactly the same mistakes in the next assignment.” Once again, she expressed her frustration and her wishes that she could be honest with the students and ask them if they had “even read anything that I wrote?” She wanted to tell them that she had spent many hours providing useful feedback that would assist in their learning. She felt that many students only looked at the mark rather than the in-text comments.

Research Question Four

Which teaching presence components do tutors believe are important in supporting learning?

Leanne felt that, in general, tutor attributes included such things as patience, innovation and commitment, as well as content and pedagogical knowledge. Leanne’s reference to content was particularly relevant, as she had only ever taught this educational psychology unit as part of this online degree. This was an area in which she had qualifications and felt very confident and competent.

Leanne expressed a belief in teaching in ways that demonstrate patience and self- reflection and expected tutors to be committed to their role whilst demonstrating content and teaching skills. While initially noting that she did not

think that there were too many differences to teaching online or on campus, Leanne asserted that a tutor could be excellent and committed regardless of whether they were teaching online or in a traditional classroom. She felt that “other than the fact that you have to have some technological skills, the underlying commitment and having the knowledge and all those sorts of things, are needed when you’re doing any kind of teaching.” She claimed that the technological skills were very easy to develop and that she had not found a problem in any of the technological techniques that had been provided within her blackboard site. Although Leanne admitted that she had not previously “used wikis or blogs,” she considered that for her “they’re just modifications to a theme and most things are fairly intuitive, aren’t they? So I can understand how something works.” Because Leanne had lived overseas before restarting work, she had not been able to attend any of the training sessions. In her interview she described her initial induction session:

Really, I never got any training on Blackboard. I was really just dumped in, it was that really quick session we had that day [referring to a session with me], like this is how you do it, jump on, add my name and I was like My God! What have I let myself in for?

However it appears that once the initial panic had settled she was able to rely on her technical expertise picked up through her own business that she had developed and created independently.

It wasn’t a really big issue to pick it up ...because, I guess I’m familiar with other things, and I’ve got my own website that I’ve developed myself so I know how to do all that sort of thing and I’ve probably learnt more from my website than probably I have through this job, but I guess that’s because I had to do that by myself.

Leanne felt a need to provide support for all of her students, but asserted that she had limited opportunity to improve their skills. One strategy that she had used with students to try to build their confidence was to encourage them to post without worrying too much about getting it wrong. Leanne explained that she felt it

important for students not to feel “humiliated” by getting something wrong and she addressed this on the discussion board using a “question-type format to help lead the student to the right answer.”

She explained that many students quickly realised that they had to be strategic and ensure that their concentration focused on the assignments, as that was where the marks were allocated. She felt that she had “encouraged and explained to students that the activities are designed to help them to answer assignment questions.” Leanne had also told students that “working on the activities created opportunities for them to get feedback on their thinking and development,” but stated that the students “didn’t see that, particularly first-year students” saying that many needed assistance and support in understanding the requirements for academic learning. Her perspective was that if the university is telling students that these activities are valuable, then they should be offering marks for them to prove that. However, Leanne noted that from a “global perspective that students should be responsible for their own learning and that teaching staff should be developing curiosity and the desire to learn.” Nevertheless, she also recognised that for many students there was a need for pragmatism because “in a real-world situation where people are really time-poor, and many people are working full-time and doing this course, they are going to have to work out what’s important and allocate their time accordingly.”

Research Question Five

Which factors impact on tutors’ ability to provide a visible online teaching presence?

Leanne identified one area in online teaching that differed from face-to-face teaching. She claimed that in some cases, for both staff and students, it was not

possible for personality, which might demonstrate their commitment, to shine through.

The underlying things of being committed and patient and non-judgemental and all those sorts of aspects have got to be got across, irrespective. I think that it's impossible to show any personality in an online situation because that requires emotion and you don't see any emotional content. So I guess you lose that in an online environment.

She explained that although as a tutor she felt a need to develop relationships with her students, she felt that the online environment could hinder relationship development and that sometimes students were craving a “real person” so that they could actually see that emotion and make connections. She had not yet identified appropriate ways of allowing this to happen.

Leanne was concerned that some of her students might not demonstrate the potential for learning that was required. She believed that many of these first-year students had no idea of what to expect and what was involved in university study.

As identified in Chapter One, this cohort of students had open access to six of their first-year units, meaning that many were coming to university without academic skills. Leanne explained that she had witnessed a high rate of failure among students who did not have basic academic writing or research skills. “Every session there are students that are engaging who just don't have the academic writing skills, and research skills too.” She felt “extremely sorry for those ones because you know they're putting in the effort and they're really trying.” It was difficult for Leanne to define the problem, but she guessed that some students just did not have the intelligence required for academic study. I questioned whether this really meant lack of intelligence or lack of education; Leanne agreed that “it's probably both. Just because someone doesn't have the education doesn't mean they don't have the intelligence, because you might not have had the opportunity for the education.”

There was some discussion around how students should be supported when they were having difficulties developing the writing skills that were required. She believed that “you can get those skills, can’t you? If you’ve got the intelligence you can acquire those skills.” She felt that by taking part in the units of study, accessing the materials and really getting involved with what was on offer, students would be able to increase their competence in writing. She did concede, however, that some students would not acquire the skills regardless of how well they were scaffolded. She hoped that those were the students who were failing, rather than those who had the potential but were unable to understand the requirements of university study. However, she noted that a large cohort of students chose not to be active on the discussion board and apparently did not engage with the unit content. Leanne expressed disappointment that many students did not take advantages of the “opportunities that are being provided to them.” She claimed she spent a great deal of her time (particularly in the early stages of the unit) encouraging students on to the discussion board, and this is borne out by her number of posts in this area. Leanne had even tried changing the discussion board’s font size and colour to attract the students’ attention.

Leanne felt that although she had attempted to create and support discussion within the discussion board, it was actually a rather one-sided process as there was actually “no discussion whatsoever.” However, she also believed that it was not necessarily the fault of the student and said that it was almost impossible to create discussion in many cases, because the students were asked to post on questions that were not open-ended enough to develop discussion. She felt that often there was really only one answer. Once a few students had answered, it seemed pointless for others to repeat it. Having identified the creation of real discussion as a problem

area, Leanne outlined how she had tried to support this within her groups. She explained that to try to generate discussion she had split groups into two and asked one group to answer the question and the other group to respond to those answers. She felt that she hadn't "nailed it" however, as this process did not appear to make much difference to participation. Surprisingly (given the assertion mentioned earlier), she had not felt the desire to restructure any of the questions to ascertain whether, in fact, open-ended questions would encourage more participation.

Leanne was asked if the size of the group (75 students) had decreased discussion opportunities. She did not believe that this was an issue, in fact contended that the opposite was probably true. Because so few students participated, Leanne felt that the group size in itself was irrelevant.

Leanne outlined how the weeks progressed within her discussion boards. Students posted most frequently in the first couple of weeks, when they introduced themselves. A "fairly dramatic" drop-off followed, and by halfway through the teaching period, only 10%–15% of the students were actively engaged on the discussion board. She again highlighted her belief that this was due to the fact that there was no reward for participating. She expressed her concerns around the course set-up, stating "the way the course is set up is no different to it just being just a general distance course." She felt that she could say this with some authority, having "done a lot of my study as an external student." Leanne went on to explain that although the course was set up within an online environment, she felt that "what we are doing here is basically a distance course within an online environment without taking full advantage of the online environment." When questioned around what she would do differently to improve teaching quality, she expressed a strong belief in mandating the interactions. She repeated her belief that perhaps if students "got used

to the concept of interacting” then it would become the norm. She also believed that “open-ended questions” would encourage students to “actually interact.”

Discussion of Leanne’s Beliefs and Teaching Presence

This chapter presented a case study of Leanne and her online tutoring practice. It concludes with a brief overview of Leanne’s case as it relates to the research questions.

Research Question One: What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

Only 2% of Leanne’s posts were dedicated to this element, and these were simple welcoming posts.

Research Question Two: What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

Nearly half of Leanne’s posts (46%) were dedicated to this element, with the majority being shared between the encouraging and reinforcing indicator and the prompting discussion indicator. Interestingly, when I analysed the interview data these two areas came up repeatedly, with Leanne reiterating that she put a great deal of effort into supporting student interaction and in trying to develop discussion. However, she felt that her efforts had largely been in vain as many students chose not to engage. She believed that those students who were not posting were unlikely to be reading other posts. She felt that many students just put out cries for help, without making much effort to ascertain whether the information had already been posted.

Research Question Three: What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

More than half of Leanne's posts (52%) were dedicated to this element, with most of her comments being within the presenting content or questions indicator. It is interesting to note that there are strong links between these two elements for Leanne; she believed that asking students questions would encourage them to become more active in the conversations. She also mentioned that she had been surprised that many students had thanked her for the extra information that she provided, even although she had not seen them as online participants.

Research Question Four: Which teaching components do tutors believe are important in supporting learning?

Leanne believed that learning was a two-way process in which students were supported in their learning by knowledgeable teaching staff but took some responsibility for their own learning. Part of this involved students being able to access relevant materials, but also making proper use of those materials. She believed interaction to be crucial to the learning process, but found that many students operated independently did not read other students' posts. She felt strongly that this occurred because in many cases the tasks that students were given were not open-ended enough to encourage discussion. Although believing that her role was to develop critical thinking in her students, she recognised that for many the course was more about obtaining a qualification.

Research Question Five: Which factors impact on tutors' ability to provide a visible online teaching presence?

Leanne believed that she had put a lot of effort into providing effective feedback for her students but felt frustrated that this appeared to have little impact.

As stated earlier, she believed that interaction equates to educational success, and accounted for the lack of interaction within her discussion boards in two main ways: the questions that students were asked were not sufficiently open-ended to promote online discussion, and students very quickly worked out that if there were no marks to be gained by participating, then they would not bother doing so.

In contrast to Mario (Chapter Five) who adopted a managerial role within Berge's four categories, Leanne adopted a *pedagogical* role, in which she provided insights from her subject knowledge and experience and tried to use questions and probes to encourage student responses. The content of this unit was well within Leanne's area of expertise. She was an experienced primary schoolteacher and had a PhD in psychology. She stated that she was very comfortable with the content of the unit and her ability to support student learning in this area. However, although she had provided some additional resources, mainly in the form of links to journal articles, she did not consider the provision of additional resources or activities to be a part of her role nor that she should teach the students how to use these resources. Whilst she believed that she worked to the best of her ability, and that she provided a service within the allocated time frame, she admitted that she could detach from the role. Leanne believed that she had managed to automate much of the work, and felt that students could not be expected to engage on the discussion board when the questions were not open-ended enough to support this effectively and when no marks were allocated for engagement. Although she had attempted a few strategies to increase communication, they were not successful and she had not continued that approach. She seemed to accept that this was the way it had to be, stating that she had no idea if anything she did had made any impact on student learning.

Summary of Chapter

This chapter provided data and analysis from Phases Two and Three about Leanne's perspective on what it means to be an online tutor. The next chapter performs the same function for a third online tutor, Nelle.

CHAPTER SEVEN

Case Study – Nelle

The previous chapter contained the data and analysis from Phases Two and Three relating to Leanne. This chapter relates to Nelle's perspective about what it means to be an online tutor.

Nelle's Profile

In 2011 Nelle had been working as an online tutor for three years, having come to West Australian University from nine years of teaching in an independent primary school where she had achieved senior teacher status before leaving to have children. She expressed a desire to study at a higher level, but acknowledged that her family meant she would not be able to give it the commitment that it required.

I really want to do my Masters. One day, I will. It's just too hard with little kids at the moment. I can't give it my all, so I don't want to do it, unless I can really commit the time and energy that it would need.

Employed as a part-time off-campus tutor, this was the fifth time that Nelle had worked in this particular educational psychology unit. When discussing why she had chosen the profession of teaching, she explained that she had had an enjoyable primary school experience with some very inspiring schoolteachers. However, what had really motivated her into the profession had been the “ineffectiveness of one teacher in particular” and she had wanted to be the “opposite” of her. Although it had been a long time ago, her year with that teacher had left a lasting impression. Nelle clarified just what this experience had meant to her:

In Grade three I had a really bad teacher and it just put me off because I loved my primary school, and I had some really inspiring teachers as well... But she was just very, very strict. Everyone's not allowed to talk, no interaction, there was no group work, nothing - just a very cold, hard, stern approach. Probably wouldn't even greet the students, I don't know. I mean, my memory is foggy because it was primary school, but I know I was really affected by it.

She had come out of that experience, determined not to be like that teacher and to ensure that no one ever considered her in that light.

Nelle had two young children and was able to continue to work with support from her mother, who minded the children on the days that she did her online work. She also found it convenient to work in the evenings when the children were in bed. As a primary teacher, her only experience of the educational psychology content of this unit was gained when she was a student herself 13 or so years before. However, this was her fifth time working in the unit. She was responsible for teaching and assessing one group of 75 students. She believed that effective tutors were those who developed strong relationships with their students and “don’t become complacent but constantly reflect on the teaching, seeking ways to improve.” Although Nelle believed that she tried to do that to the best of her ability, she also admitted that time constraints and her small children impacted on her effectiveness. She noted that she had been much more involved in professional development when been classroom-based, but that was before she had children.

Nelle’s Elements of Teaching Presence within COI

As in the previous two case study chapters (Mario’s and Leanne’s), the three elements of the teaching presence aspect of COI examined were instructional design and organisation, facilitating reflection and discourse, and direct instruction. All Nelle’s posts were inspected, classified according to the COI framework, and included in the analysis. Following my analysis of the discussion board data, Nelle participated in a semi-structured interview so I could ascertain how she accounted for her postings.

Table 7.1 shows the numbers of Nelle’s and her students’ posts. The first column identifies the week of the unit and the topic the students were studying for

that week. The table also shows how many students were active on the discussion board for each week, the percentage out of the group of 75, how many posts those students made, and identifies Nelle's posts related to the three elements of the COI.

Table 7.1
Nelle's and her Students' Weekly Posts

Week Number and Topic	Number of active students	Total posts	Number of student posts	Number of tutor posts	Instructional Design and Organisation	Facilitating Reflection and Discourse	Direct Instruction
1- Professionalism	32 (43%)	74	53	21	4	13	4
2 - Cognitive development	29 (39%)	73	59	14	0	7	7
3 – Behaviourism	23 (31%)	80	67	13	1	8	4
4 - Cognitive learning	20 (27%)	74	55	19	2	10	7
5 -Constructing knowledge	13 (17%)	27	19	8	0	3	5
6 - Motivation	15 (20%)	69	60	9	0	7	2
7 - Classroom management	16 (21%)	43	39	4	0	3	1
8 – Diversity	0	0	0	0	0	0	0
9 - Positive environments	0	0	0	0	0	0	0
10 – Assessment	0	0	0	0	0	0	0
11 – eLearning	7 (9%)	25	20	5	0	5	0
12 – Overview	7 (9%)	14	12	2	0	2	0
Total posts over the 12-week timeframe		479	384	95	7	58	30
Posts as percentages of the total posts		100% of total posts	80% of total posts	20% of total posts	7% of total tutor posts	61% of total tutor posts	32% of total tutor posts

As noted in the previous chapter, another research project clashed with mine in 2011. Neither Nelle nor her students were expected to post within the discussion board in weeks 9 and 10. They were given two different questions to discuss related to the topics in those weeks and encouraged to post to a separate blogging site. Although the tutors had access to these sites, the students were de-identified, meaning that it was not possible for tutors to ascertain whether those students active within the discussion board were also active bloggers. Unfortunately, Nelle erroneously advised her students that they should not post in week 8 as well as in

weeks 9 and 10, meaning that I collected no quantitative data in those three weeks. Moreover, this could have led to reduced post frequency in the final two weeks.

Figure 7.1 contains the same information as Table 7.1 in graphical format.

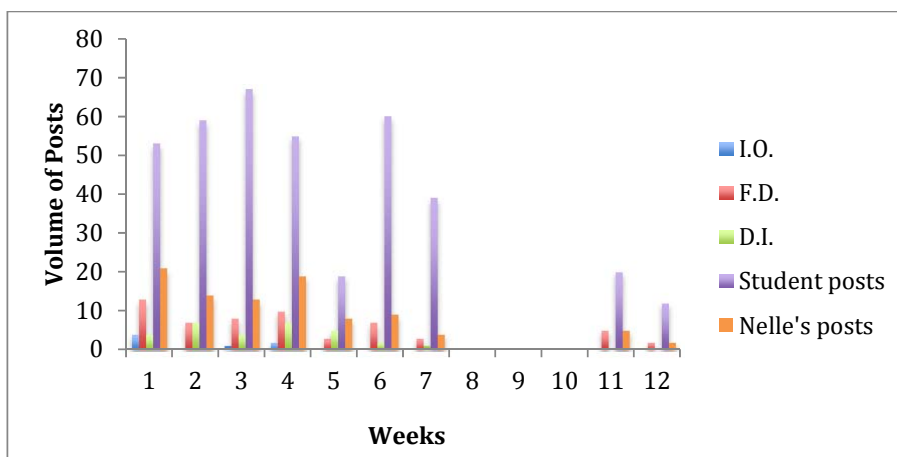


Figure 7.1. Nelle and her Students' Weekly Posts and the Three Elements of Teaching Presence - instructional design and organisation (I.O.); facilitating reflection and discourse (F.D.); and direct instruction (D.I.)

Table 7.1 and Figure 7.1 show that the maximum number of student participants occurred in week one, when less than half the cohort posted comments. Nelle responded 21 times, her largest number of posts in any week of the study period. Interestingly, by week three only 23 students were active, but they posted 67 times, while Nelle posted 13 times. By the last week of the unit, seven students remained active, with 12 posts. Over the 12-week study period, students made 384 posts and Nelle made 95. Nelle made few posts within the element of instructional design and organisation, the majority in facilitating reflection and discourse, and a large minority within the element of direct instruction. Nelle's 95 posts represent 20% of all posts for her discussion board.

The remainder of the chapter is concerned with Nelle's perspectives on these results, described with reference to the research questions.

Research Question One

What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

As shown in Table 7.1, 7% of Nelle's posts were related to instructional design and organisation. This element of teaching presence involves tutors making posts related to: setting of curriculum; designing methods; establishing time parameters; utilising the medium effectively; and making macro-level comments about course content. As noted in earlier case study chapters, there was not an expectation from the university, that the sessional tutors would be particularly active within this element as there was little opportunity for them to be part of the design or organisation of either the course or its individual units.

The following table (Table 7.2) presents the indicators within the first element of instructional design and organisation and the associated frequencies of Nelle's posts. The comments used as examples were made by Nelle on her individual discussion boards.

Table 7.2
Frequency of posts (Nelle) – Instructional Design & Organisation

Indicators	Frequency of posts	Example
Setting curriculum (1/1)	3	<i>Your task is to describe what Mr Hanson might have done differently that would have been more effective. (week 3)</i>
Designing methods (1/2)	0	
Establishing time parameters 1/3)	0	
Utilising the medium effectively (1/4)	1	<i>Please click reply to this thread to post your ideas about this topic. Remember to agree/disagree and extend on others' ideas. (week 6)</i>
Establishing netiquette (1/5)	0	
Making macro-level comments about course content (1/6)	3	<i>I agree that professionalism is exhibited with motherhood. I have two boys and I am constantly reflecting on my decisions in order to become the best parent I can be. This is very similar to reflective practice in teaching and why this reflection is such a large part of this unit. (week 6)</i>

As indicated in Table 7.2, Nelle had seven posts within this element. Of the four tutors involved in this case study research, Nelle had the largest volume of posts

in the instructional design category; Table 7.2 shows their distribution across the six indicators. When asked to comment on her relatively strong posting profile in this category, she responded that sometimes students just need a little encouragement to get going in the early weeks, and she believed that part of her role was to “make them feel comfortable by ensuring that they understood how the unit worked.”

Research Question Two

What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

As identified in Table 7.1, 61% (58 of 95) of Nelle’s posts were categorised as being within the element of facilitating reflection and discourse. As outlined in earlier case study chapters, this element is crucial to the teaching role. Nelle has most of her posts within this element, originally conceptualised as “building understanding” by the COI developers (Swan & Ice, 2010). Also previously mentioned is that managing student discussion to support their understanding is an important aspect of teaching within any environment, and it is critical to have tutors who ensure cognitive development within a positive learning environment, and that they were part of this growth of development (Garrison, 2011). To achieve this within an online learning environment, there tutors are expected to review and comment on student posts, raise questions for them to consider, and make observations in ways that move discussions forward.

The following table (Table 7.3) presents the indicators within the second element of facilitating reflection and discourse and the associated frequencies of Nelle’s posts.

The comments used as examples were made by Nelle on her individual discussion boards.

Table 7.3

Frequency of posts (Nelle) – Facilitating Reflection & Discourse

Indicators	Frequency of posts	Example
Identifying areas of agreement/disagreement (2/1)	2	<i>I agree with your point about the rapidly changing face of technology Teresa. I think recognising this and being committed to keeping updated with new technologies is going to be essential for effective teachers in the 21st century (week 1)</i>
Seeking to reach consensus or understanding (2/2)	1	<i>These have been backed up with references from the text. Well done! Does anyone have any different suggestions? (week 3)</i>
Encouraging, acknowledging or reinforcing student contribution (2/3)	47	<i>This is like a mini-assignment! Thank you for putting so much effort into this activity. It is visually appealing, clear and easy to comprehend. (week 6)</i>
Setting the climate for learning (2/4)	2	<i>Instead of simply posting your own answers, make this a more valuable learning experience by commenting on another student's answer - do you agree or disagree? Can you support your ideas with research? (week 2)</i>
Drawing in participants, prompting discussion (2/5)	6	<i>This example about your children's different developmental rates perfectly illustrates the point about environment influencing a child's development. How do you think this transfers into the classroom? Anyone is welcome to add to this (week 2)</i>
Assessing the efficacy of the process (2/6)	0	

As indicated in Table 7.1, Nelle had 58 posts within the element of facilitating reflection and discourse. When her discussion board was analysed for this aspect of her teaching presence, a large majority (81% of her posts within this element) were about making students feel that their posts were valued.

When discussing the large proportion of posts within the encouraging and reinforcing indicator of this element, Nelle explained that she felt that students in their first year of study “do need acknowledgment for their contributions.” She believed that the students needed to know that “someone was reading their work” and that they needed “confirmation that they were on the right track or if they have misinterpreted an idea.” She identified how she had responded to students with comments such as “Outstanding responses here Andrew. You have supported your ideas with the theory well!”

Although Nelle felt strongly that encouragement and reinforcement were crucial aspects of the teaching role, she also stated that “tutors need to balance this with encouraging further discussion or extending students’ thinking.” She provided an example of her trying to develop the discussion with “Hi Simone. This example

about your children's different developmental rates perfectly illustrates the point about environment influencing a child's development. How do you think this transfers into the classroom? Anyone is welcome to add to this." However, although Nelle believed this to be an important element of the online teaching role, she only used these types of posts six times throughout the 12-week teaching period.

Although Nelle felt that she had improved her online teaching skills over her three years in the role, she identified the development of discussion in her student group as an area where she struggled and would welcome more professional development to give her more strategies and ideas. She explained her thinking and how she had tried to improve and develop the discussion within her board. Although she described the unit overall as being "well organised into very clear weekly modules that explained the various tasks and key readings," she took the opportunity to reorganise the structure of the individual discussion board forums in an attempt to promote greater discussion and collaboration among students. Nelle believed that this initiative had some effect for some groups, in that "it promoted a little bit more discussion." Because she had separated bigger tasks into little sections, she felt that this was "less daunting" for students than one big task that can "put them off posting it up." Although successful for some, it had little effect on other students; she found it difficult to identify what made the difference and because "every single group [I] get is so different so it's really hard to gauge." Although in this study period Nelle had responsibility for the teaching of one group of 75 students, on other occasions she had two groups of students. Interestingly, she noted that she often found them to be completely different in their participation levels. However, one common thread that Nelle identified in her two groups was that some students took the lead and encouraged more students to become involved. She explained that "if you've got a

couple of keen contributors that are a little bit intelligent, then that group seems to run nicely.” Acknowledging a belief that students who participated in discussions were more likely to experience success, she felt that students were “craving that information” and the more they “participate the easier it is to support that learning and to keep the conversations going.” When she had looked back through her previous units to compare any changes that had been made to the present iteration, and viewed the lack of participation, she considered that she “didn’t really give them much.” She was uncomfortable with this situation, but when referring to the time when the groups had become really small and few students were participating online in the second half of the study period, she felt that if “there was no one there” she could not identify what she might have done differently.

Nelle noted that online tutors have an advantage over on-campus tutors in being able to view other tutors in action. Because all the online conversations are recorded, it is easy to view what other tutors are doing with their groups and to learn ideas or strategies that appear to work well. Nelle said that she really enjoyed being able to access other tutors’ discussion boards and felt that they “had helped me out a lot.” This was the case even though she needed that support much more as a junior tutor, when she “would look at what they’re posting up and their ideas and I’d be like ... in awe of some tutors, thinking ‘she’s just so clever’.” She explained that she held real admiration for other tutors’ online teaching skills. “I worked with one particular coordinator, on one unit and I was just like “Wow!” She described this coordinator as multi-skilled in her work with students; she was “so smart, and so witty and just so efficient and competent at her job.” Nelle explained that she felt privileged that she was able to access other tutors’ thinking and model some of her practice on what they do. She agreed that this was not something that could happen within a school

classroom or even a face-to-face classroom, where many teachers or tutors felt “threatened by someone watching them teach.”

Her development over the previous three years had led her to conclude that giving links to real life experiences was beneficial to students and supported a relationship-building. She described how her confidence had grown and some of her strategies had altered over time, allowing her to support students to make links from real life to the theories of teaching they were studying. “When it’s something that they’ve personally experienced, then they are more willing to share and, and, you know, associate the theory with actual reality.” She admitted that making those links was much more difficult for first-year students who had not yet experienced a school classroom. She tried to support them in this by sharing her own experiences. “I give them a lot more of ‘oh, this is how I did it in my classroom’, or here’s an example of this’” Reiterating that her confidence was growing over the years, Nelle said

I think I used to be a bit afraid of doing that (sharing experiences) because I would say, “I admit that this is not exemplar in any way, but this is one way of doing it that I’ve found successful. But you are welcome to try different ways of doing things.

She explained that she did not feel the need to make those kinds of statements anymore, as she was confident that it was a useful strategy and that her students welcomed those connections.

Research Question Three

What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

As identified in Table 7.1, 32% of Nelle’s posts were within this element. As outlined in previous case study chapters, direct instruction is contextualised as students being led through their learning by subject matter experts who share their knowledge through intellectual and scholarly leadership. These tutors provide

additional sources of information to support and diagnose accurate understanding, and move the discussion forward to allow learners to develop new understandings. Explanatory feedback is crucial.

The following table (Table 7.4) shows how much of Nelle's discussion was dedicated to these types of posts, and includes examples. As noted earlier, 30 (32%) of Nelle's posts were identified as being in the direct instruction category, with half in diagnosing misconceptions and none in the giving explanatory feedback indicator. However, these two elements could be seen as being closely linked, as tutors often diagnose a misconception and give explanatory feedback to clarify as illustrated in the misconception example, where Nelle identified the error and gives the correction in the same response.

Table 7.4
Frequency of Posts (Nelle) – Direct Instruction

Indicators	Frequency of posts	Examples
Present content/questions (3/1)	6	<i>Your response is accurate but could be enhanced if you refer to Piaget's stages of development or other learning theories to explain why this activity is unsuitable? (week 4)</i>
Focus the discussion on specific issues (3/2)	6	<i>What is Jimmy likely to do the next time he is called on? (week 2)</i>
Summarise the discussion (3/3)	2	<i>This is an interesting discussion. I have always taught handwriting, but must admit that it is so hard to fit everything in to a jam-packed timetable. I can't understand why teachers are being told not to teach it, as it is still a very necessary skill. On the flipside, technology is taking over and is now a part of most lessons (smartboards, laptops, PCs, etc.) so we also need to dedicate some time to teach students how to type. P.S. How many of us use the notes applications on smartphones for shopping lists? Is this the type of thing we should be encouraging students to do? (week 2)</i>
Confirm understanding through explanatory feedback (3/4)	0	
Diagnose misconceptions (3/5)	15	<i>I'm just looking at referencing today and noticed that your in-text referencing isn't quite right. You need to follow the APA guide carefully as you have the page number and date of publication mixed up and also you are missing the necessary punctuation. Also the title needs to be in italics (week 2)</i>
Inject knowledge from additional sources (3/6)	0	
Responding to technical concerns (3/7)	1	<i>You don't post your journal entries here. The journals are part of your assignment 1 which is submitted via the drop box in 4 weeks time. This is the discussion forum – please read the titles and descriptions that I have written as they link in with the weekly tasks in the Learning Modules. (week 1)</i>

Twenty per cent of Nelle's posts provided content or questions to encourage student thinking, with the same volume allocated to focussing the students on relevant discussion topics. Nelle believed that tutors had a responsibility to provide appropriate learning experiences then scaffold learners in varieties of ways to support them to reach their potential. She agreed that social interaction was an important aspect and that students should be working with resources that challenge their existing understandings. Demonstrating views that describe how children would learn in primary school, she felt that students need a variety of experiences including "inquiring, experimenting, engaging in discussion and this allows them to assimilate this new knowledge."

Although strongly endorsing the view that students need a variety of experiences, Nelle, admitted that she had not created any such opportunities for her online tertiary students. She claimed that she had not been given the opportunity to do so, and again confessed to a lack of confidence about being proactive by providing additional activities and materials. She believed that other members of the teaching staff had a much wider understanding of the content.

I think if I had more expertise in the area, I'd feel more comfortable doing that. But at the moment, I feel like everybody else... their knowledge base is better than mine, so why would I...? Others seem to have such a wealth of knowledge.

She explained that part of this lack of confidence, for her, was due to the isolation of the role.

Because you're on your own and you've got your own sort of thoughts and you do hear something that conflicts with what you already know and you think "oh gosh, I should have been doing it that way. Wow! That's changed my whole viewpoint" and things like that.

Nelle explained that completing my questionnaire, and revisiting what she had done in that particular teaching period during the interview had raised some

issues for her that she had not been aware of or had even really considered. She explained that when she looked at the discussion board, she saw that in some weeks she had made only brief encouraging types of posts (suggesting she was marking assignments), agreeing that this demonstrated that she was not the type of tutor that she would like to be.

Nelle recognised the need to respond regularly to students so that they felt that someone was reading their posts. She explained that she kept a spreadsheet record of students who had participated to ensure that they were being responded to, but admitted that “it’s hard to put in a chat, quickly respond, and I forget to update my record ... so it just kind of gets away from you. At the beginning I do try and be a bit diligent.” It is interesting to note Nelle’s terminology here – “put in a chat”; although this may well encourage the social aspect of teaching and learning, it is unlikely to support meaningful learning. I asked if she had identified any solutions for improvement for struggling students. Nelle had given this some thought, and responded that it would be useful for literacy skills to be a compulsory first unit. Not only would this support students in their learning, it would allow teaching staff to know that certain topics had been covered and they could expect students to have the knowledge needed to progress to a higher level.

Research Question Four

Which teaching presence components do tutors believe are important in supporting learning?

As noted earlier, Nelle believed that relationship-building was crucial in effective teaching, and that it was important that students were able to get to “know their tutor.” She stated a belief that students need to “become passionate, informed and motivated learners” and that it was a tutor’s responsibility to encourage this.

Students needed to be developing an “enquiring mind, sourcing their own information independently in ways that prepare for their future career,” with their tutors playing an important role in the learning. She believed that an effective tutor was one who “strives to cater for the variety of needs and abilities of the students and one who ensures that each of those students is given the maximum opportunity to succeed and reach their potential.” She also stated that they should “inspire students to become self-motivated learners.” Nelle expanded on how she saw her online role, believing that she had tried to “provide a positive and supportive learning environment that facilitates discussion.” She provided “both positive and constructive feedback to encourage learners to contribute and improve their academic writing and to succeed in applying concepts and theories within the classroom.” However, she did feel that many students needed “more guidance than it was possible to give” because they had commenced the course with “such poor literacy skills and a lack of experience in basic essay writing or research skills.” As in previous case studies, Nelle was referring to students who had entered the course through open-access units in which they could pass two units to demonstrate their competence and ability to continue into a fully accredited course.

Nelle explained that students within this unit were encouraged to “participate in discussions, complete the reading and tasks and use some used search engines to find relevant journal articles.” However, she had expected learners to be “self-motivated, strive for the best, to question and challenge information.” She admitted that only a few of her students had these attributes, but those that had were “awesome”; she characterised them as the “small number who continued to be active on the discussion board.” She admitted that those students came to the course and their learning with those skills already in place, and that she could not attribute their

actions to anything that she had done.

Nelle's data suggest that her attempts to support learning worked better with some groups than others. She outlined how "every group is just so different. You can be more enthusiastic with one group and more diligent and put in more time and have less - less feedback, less responses, less discussion." She could not account for why that happened, but admitted that this would be very useful to know.

Nelle was asked how easy she had found communication within the online teaching environment. She stated that she had to learn how to convey her thoughts very clearly without being blunt or offensive, and noted that it was "difficult to personalise teaching when you have to rely on written communication." She was concerned about the course's avenues of communication and how she could ensure that students would see her as being supportive and caring without the opportunities for casual conversations that might support this. She saw this as a different process in an online setting and one in which levels of respect were also important to consider.

You have to communicate differently because they're not seeing you, there's no warm relationship. There's no chatting on there about how was your day, how was your weekend, or did you get through that last week, none of that rapport that you create if you are seeing students face-to-face. And so therefore the level of respect for one another is not really there either, is it? You've got to create respect in a different way, by being informative and helpful and encouraging and - I think that's probably why I do a lot of positive praise because you sort of feel like, oh, there's no other way to be a warm person.

Comparing Nelle's data to the online teaching roles identified by Berge (1995) showed she adopted a social role in which she encouraged students in friendly ways by affirming and encouraging a social environment. She felt that she presented herself as a warm person, and whilst affirming that she felt the building of relationships was an important aspect of teaching, she was unsure how to develop them online. She felt relationship-building was not always evident in online teaching

and expressed some concern when observing other online tutors in action, identifying them as “cold and distant.” She was concerned, sometimes, that this was part of the expectation of the role and was nervous that she felt “like maybe that's what I'm supposed to morph into.” She mentioned that she observed some tutors being blunt or offensive with students. She found this a difficult topic to discuss, but admitted that she worked with one coordinator whose posts to students had often made her feel very uncomfortable.

Harking back to the reasons for her choice of teaching as a profession, Nelle used the recent examples (above) of what she considered to be poor teaching to improve her own practice and ensure that she provided quality teaching for her students that presented her in a good light. She admitted that it was not always easy to maintain a supportive persona, and confessed her concern that at times, when rushed, she had not been as warm as she might have been. Looking back through her comments she sometimes thought “oh that sounds awful!” although feeling that she was never intentionally blunt with a student. She recognised that students could be brusque with staff too and she purposely tried to take some time in responding to those students. She tried to have the philosophy of trying to “type and smile at the same time” but admitted that was not always easy to do as “sometimes we are just so time constrained that it's hard not to be a little sharp.”

Research Question Five

Which factors impact on tutors' ability to provide a visible online teaching presence?

When questioned about the common trait for students to participate in the first half of the unit and to discontinue for the second half, Nelle responded by saying that many students have just too many activities to complete. She believed

that students had to become strategic and had to choose how to use their time most effectively. She explained that "...a lot of students are time-poor, they put in the effort at the beginning and then decide they need to focus on assignments rather than participation." She explained that every group that she had worked with "dwindles down from the original 75 very quickly, with many students never participating." She felt that on average she would have "between 40 and 50 students who would be submitting assignments within each group, but only 30 or so would be active in the discussion board, and then by the end there were very few postings on the discussion board at all." Nelle also considered that many students divined that there were no penalties for not posting on the discussion board or taking part in the recommended activities, and did not see the value in engagement. She suggested that students follow each others' leads. "Perhaps it's a bit of a flow-on or knock-on effect, where they see other students not participating and they think 'oh it's okay if we don't because we're not being reprimanded, there's no loss of marks for it'." She felt that giving marks for participation might encourage more involvement, and had some suggestions for how it might work.

You give them a "you cannot pass unless you post up five pieces of work" or something like that. I really do think that that's probably the big factor. They realise that it's not compulsory, being such time-poor people who work full time and trying to attempt to do a career change as well.

Nelle believed that the majority of her students were not active participants and had offered some reasons for that, such as a need to get the course completed in the shortest possible time, and a feeling that there was little advantage to taking part in the discussion when no marks were allocated. I then wondered whether she had felt that, as a tutor, she had opportunities to support discussion by creating her own resources and strategies to engage students. Nelle appeared to feel powerless in this regard, explaining that this was dependent upon the unit coordinator. Some unit

coordinators were happy to support flexibility and sharing of additional resources and ideas, others liked to keep a “tight ship” by ensuring that all groups had exactly the same tasks, information, activities and advice. Although Nelle agreed that consistency was important across the units, she felt that this was an area that could be much further developed in her own professional learning. Nelle stated that she “only provided a few relevant journal articles” within some of her weekly summaries. She admitted that when she reviewed her three years, she “didn’t provide students with enough encouragement to investigate new things.” She justified this because she “didn’t do enough of (her) own research to share it with them.” She felt that this was “definitely an area that (she) needed to improve on.” She explained that she struggled with providing additional academic resources, stating that “I just don’t know if the articles that I found were actually any good.” She also felt that because she had been away from study for a long time she did not know enough about what was current and was nervous of providing unsuitable materials. She suggested that sharing useful additional materials with the other tutors in the units would be useful.

Nelle noted the existence of some students who do well even when you’ve never heard of them, and joked that she found that to be “annoying” because “I’d like to think that they’d benefit from the discussion.” She explained that she had “loved” her tutorial classes when she had been a university student. She admitted that she had not done any online study so couldn’t judge whether it would be the same. Nevertheless, she had enjoyed and benefitted much more from her on-campus discussions than she had ever experienced when reading the textbook. However, although Nelle really believed that her students would benefit from online discussion, she also agreed that in many cases the questions were not open-ended enough to provide discussion opportunities for students. She would have liked the

discussion tasks to be better linked to the assessments, feeling that this would support more useful and active discussion. If the students could feel that there was real purpose in engaging within the discussion board, the participation would increase.

I think the assignments could be changed to incorporate more of the discussion board tasks. They are the guts of the unit, whereas, sometimes I feel like the assignments are almost like an add-on where someone has taken one little tiny aspect out of one of the weekly tasks and they've gone off on a tangent.

Although identifying that she really enjoyed the professional development that was offered each teaching period, much of that enjoyment was in catching up with her colleagues in the flesh. She explained how the training worked.

We have one tutor training session which seems to be very set info, you know, you go into this room if you want to learn about how to use Blackboard more. You go into this room if you want to learn about policies. They are all very broad issues. They're not really discussing the guts of the units.

Nelle would have preferred professional development opportunities that supported improvement of her own teaching practices and more specifically related to unit content and delivery.

Discussion of Nelle's Beliefs and Teaching Presence

In this chapter I presented a case study of Nelle's online tutoring practices based on data from her online discussion board and a follow-up interview. The chapter concludes with a brief overview of Nelle's case as it relates to the research questions.

Research Question One: What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

Nelle had seven posts (7%) in this area, all related to helping students to feel comfortable in what for many could be a new learning environment.

Research Question Two: What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

Nelle had 61% of her posts in this element, with a large majority within the encouraging, acknowledging or reinforcing indicator. She believed strongly in building relationships with her students and recorded posts to ensure that they received a response. Although she expressed a belief in building the discussion, her discussion board data provided little evidence that she had been successful, and during her interview she admitted that she did not feel competent in this area.

Research Question Three: What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

Thirty-two per cent of Nelle's posts were in this element, and around half related to diagnosing misconceptions. Throughout her interview she used terminology that could be related to her classroom teaching, and appeared to have much more confidence in this than in her online tertiary teaching role. She had many comments about others' superior skills and expertise, and that in many ways she could have done much more for her students than she did. She appeared to feel quite isolated in her role and would have welcomed more professional development in developing her online teaching skills.

Research Question Four: Which teaching presence components do tutors believe are important in supporting learning?

The focus of Nelle's teaching style and many of her interview comments demonstrated her belief in building relationships with her students so they would see her as a warm and caring person. She was concerned to think that she would have to adapt her personality in order to do her job effectively.

Research Question Five: Which factors impact on tutors' ability to provide a visible online teaching presence?

Nelle believed that many students had too many tasks to complete and had to prioritise carefully. This meant that most students focused on assignments rather than discussion. Additionally, she believed that the discussion topics should be more open-ended to promote discussion, but did not offer any ideas to support this within her group. Nelle did not provide any responses to students that could be considered conducive to building discussion, identifying this as an area of difficulty for her. She also admitted that she should have been more proactive in finding resources for students, but was not confident that she would be able to choose wisely.

Summary of Chapter

This chapter presented data and analysis from Phases Two and Three on Nelle's perspective of what it means to be an online tutor. The next chapter focuses on Joan.

CHAPTER EIGHT

Case Study – Joan

The previous chapter focussed on Nelle. This chapter, Chapter Eight, contains a description of Joan's perspective of what it means to be an online tutor, based on quantitative data from her discussion board and qualitative data from her supporting interview.

Joan's Profile

Joan was the oldest of the four case study tutors and had always wanted to be a teacher (but also expressed an interest in acting to her mother, who refused to consider that as an option). Joan was asked why she had become a teacher and explained that she “always enjoyed explaining something to students and seeing the lights go on. I don't think I've ever wanted to do anything else.” As a child she had a blackboard and used to teach anyone who would join in the game. She had gone straight to university upon leaving school. She taught for only two years in a high school, then got married, had children and left. She never taught in schools again. When Joan's four children had finished school, she went back to teaching, going into tertiary teaching within pre-service teacher education. By 2011 she had been working at West Australian University for nearly 30 years, mostly in a part-time capacity. Although Joan's family were grown up and had their own lives, they were a close family and she welcomed the flexibility that online teaching offered in that she could go on holidays with them whilst still working. She was happy to continue working while her health permitted. This was the second time that she had taught in this unit, and like the other three tutors she was responsible for teaching and marking the work of 75 students.

Joan had come into this online teaching unit with a wealth of on-campus

teaching experience but no online exposure, and she really struggled with the technological aspects of the role. When initially employed, she had not appreciated the level of competence that she would require to teach online effectively. However, she explained that her lack of skill gave her some understanding of how difficult it might be for some of her students, and she felt that she was really able to empathise with students who struggled with digital technology. Joan explained that she had found her first few months of teaching online to be a rather stressful time, and had often wondered whether she had made the right decision in taking on this type of work. In 2010 she visited the WAU campus for several sessions with a range of people who helped her to acquire the skills required to do the job effectively. Joan admitted “I needed lots of help in the beginning. I didn’t really know how computers worked at first. Fortunately, I got better. You can’t believe the sense of achievement I get when I actually master something.” Joan felt that online students had the extra complication of having to master the technology as well as the educational content, and was nervous that perhaps “some students didn’t complete, not because they couldn’t manage the content but that they couldn’t master the technology.” She admitted that she had a lot of sympathy for students who were struggling and she tried to make allowances for them.

Joan expressed a belief that students should be active at university, but the tutor’s main role is one of facilitator. For students, university learning should be an independent process, where “ideal learners should demonstrate a desire to learn, see the relevance of the learning and be able to act on that.” Joan believed that teaching was about “facilitating the acquisition of learning and providing the opportunity for the learner to reach these understandings.”

Joan's Elements of Teaching Presence within COI

As noted several times previously, the teaching presence aspect of the COI framework has three elements that support student learning within an online environment: instructional design and organisation; facilitating reflection and discourse; and direct instruction. Joan's postings were inspected, classified and analysed alongside data from a semi-structured interview to ascertain how she accounted for her discussion board postings.

Table 8.1 shows the numbers of Joan's and her students' posts. The first column identifies the week of the unit and the topic the students were studying for that week. The table also shows how many students were active on the discussion board for each week, the percentage out of the group of 75, how many posts those students made, and how Joan's posts match the three elements of the COI.

Table 8.1
Joan's and her Students' Weekly Posts

	Number of active students	Total posts	Number of student posts	Number of Joan's posts	Instructional Design Organisation	Facilitating Reflection and Discourse	Direct Instruction
1- Professionalism	39 (52%)	75	66	9	0	4	5
2 - Cognitive development	30 (40%)	111	90	21	1	3	17
3 - Behaviourism	32 (43%)	73	68	5	0	1	4
4 - Cognitive learning	21 (28%)	66	58	8	0	4	4
5 -Constructing knowledge	17 (23%)	29	21	8	0	4	4
6 – Motivation	11 (15%)	11	11	0	0	0	0
7 - Classroom management	13 (17%)	24	24	0	0	0	0
8 – Diversity	11 (15%)	21	12	9	0	3	6
9 - Positive environments	6 (8%)	14	13	1	0	1	0
10 – Assessment	8 (11%)	19	16	3	0	2	1
11 – eLearning	7 (9%)	28	28	0	0	0	0
12 – Overview	4 (5%)	11	11	0	0	0	0
Total posts over the 12-week timeframe		482	418	64	1	22	41
Posts as percentages of the total posts		100% of total posts	87% of total posts	13% of total posts	2% of total tutor posts	34% of total tutor posts	64% of total tutor posts

Figure 8.1 presents the same information in graphical format.

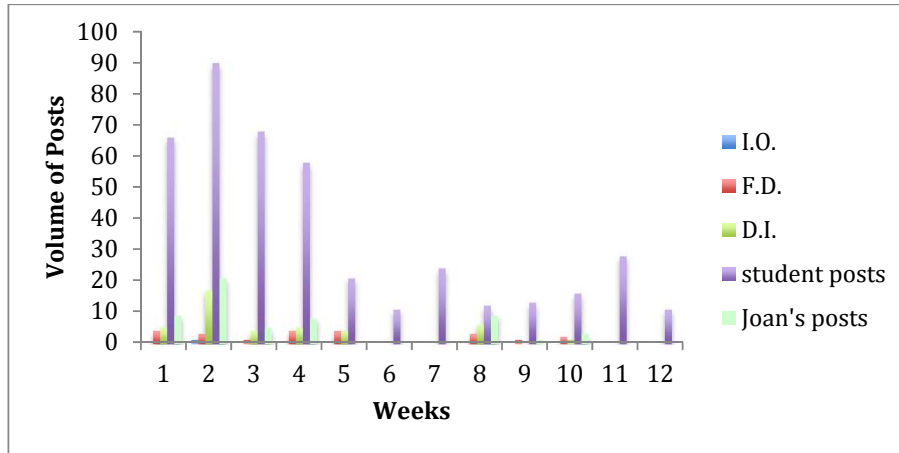


Figure 8.1. Joan's and her Students' Weekly Posts and the Three Elements of Teaching Presence – instructional design and organisation (I.O.), facilitating reflection and discourse (F.D.) and direct instruction (D.I.).

As can be identified, although there were 75 students enrolled in this group, the maximum number of active students was in the first week, with nearly half of the cohort actively posting comments and Joan responding nine times. Interestingly in week two both Joan and her students increased their posts, although the actual number of participants had decreased. By week nine, the number of active students was in single figures (6).

Joan posted most often in week two; she had no posts at all in weeks 6, 7, 11 and 12 (one third of the study period). This was a surprising finding, as tutors were paid for eight hours of teaching in each week and were expected to have regular input into their discussion boards. However, Joan explained that she had used a lot of her time in answering student emails, rather than the preferred model of interaction within the discussion board.

Over the course of the 12-week study period, as Table 8.1 shows, Joan posted one post relating to instructional design and organisation, 22 posts within facilitating reflection and discourse and 41 relating to direct instruction. Her 64 posts are

dwarfed by her students' 418; this means Joan made 13% of the total posts within the discussion board.

In the remainder of this chapter I describe Joan's elaboration of these results as obtained through her follow-up interview, with reference to my five research questions.

Research Question One

What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

As identified in Table 8.1, only one of Joan's posts (2%) was categorized as being within the element of instructional design and organisation. Joan's only comment about this element was related to email correspondence rather than to any online interaction.

Table 8.2

Frequency of posts (Joan) – Instructional Design and Organisation

Indicators	Frequency of posts	Example
Setting curriculum (1/1)	0	
Designing methods (1/2)	0	
Establishing time parameters (1/3)	0	
Utilising the medium effectively (1/4)	1	<i>To ensure a prompt reply when emailing, please include this unit's name, your full name and tutorial group number in the subject line and always use your university email account (week 1)</i>
Establishing netiquette (1/5)	0	
Making macro-level comments about course content (1/6)	0	

This aspect of teaching presence would be demonstrated by posts relating to the setting of curriculum; designing methods; establishing time parameters; utilising the medium effectively; and making macro-level comments about course content. As stated in previous case study chapters, instructional design and organisation was not expected of the tutors in this unit. All of the content and activities were provided for

the students and their tutors, with some variation across units and among tutors as to how much of their own materials and resources they provided for students.

During her interview, Joan had stated that she felt there had been no need to provide any further resources as everything that students needed was already there.

Research Question Two

What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

As identified in Table 8.1, 34% (22 of 64) of Joan's posts were categorised within the element of facilitating reflection and discourse.

This element consists of the encouragement of reflection and conversation, and as identified in earlier chapters, is vital to teaching. Conceptualised as "Building Understanding" (Swan et al., 2010), this is an important aspect of the teaching role, whether on campus or online.

The following table (Table 8.3) shows Joan's use of those strategies within her discussion board by specifying the number of posts according to each of those indicators. It includes examples of Joan's posts for each indicator.

Table 8.3
Frequency of Posts (Joan) – Facilitating Reflection and Discourse

Indicators	Frequency of posts	Example
Identifying areas of agreement/disagreement (2/1)	0	
Seeking to reach consensus or understanding (2/2)	2	<i>Learning or practice or both?(week 2)</i>
Encouraging, acknowledging or reinforcing student contribution (2/3)	17	<i>You have identified an important characteristic – that of commitment to both student and staff. Well done. (week 1)</i>
Setting the climate for learning (2/4)	0	
Drawing in participants, prompting discussion (2/5)	3	<i>What are your thoughts on Standardised National Testing such as NAPLAN? Perhaps your children have experienced NAPLAN testing and you could share your experience. Do you think it is valuable? Why or why not? (week 10)</i>
Assessing the efficacy of the process (2/6)	0	

As indicated in Table 8.1, Joan had 22 posts within this element. When her discussion board was analysed for this aspect of her teaching presence, her posts were evident in three out of the six indicators, with the majority (17) being related to encouraging, acknowledging or reinforcing student contributions, many of which were “well done”, “great” type of posts. I considered two posts to be trying to encourage consensus, and three to relate to drawing in participants to prompt some discussion. As stated earlier, this element focuses on encouragement of reflection and conversation, and one might expect this to be a prominent aspect of any tutor’s work. However, Joan identified in her interview that she did not consider her role to be that of a tutor.

Joan discussed how she saw her job as an online tutor, stating that she “directed and encouraged” in her online role. When questioned as to whether this was really teaching, she explained that, within this online program, where the materials were all provided, the activities were set up and students were required to respond on discussion boards in collaboration with their fellow students, that her role was certainly not one of teaching, rather it was “more about facilitating. When the lessons are all set up there is no real need for a tutor.” Joan was very clear in how online teaching worked for her. “Oh, oh, no, I didn’t teach. I mean, definitely if you’re in your own class, if you’re a tutor of a class you would. But I didn’t feel as though I was a tutor of a class.” She explained that she considered herself as a “facilitator and a communicator. I felt I communicated quite well, but I wouldn’t have called it teaching.” She continued, “I honestly thought it was so obvious what they had to do and read and so I didn’t really have to get involved in actual teaching.” She believed that her role was just to be there and just keep the conversations flowing along. Joan’s comments included “well done,” “Yes good

points – maturation and experience,” “Yes very good.” She explained how she had managed the group by directing them to other students’ comments for support, rather than offering any herself.

When Joan was questioned about particular strategies that she used to support student engagement, she said that she had gone through the discussion boards and when students had posted something that was useful or relevant, she would highlight this to other students. She believed in using student names to personalise the process. She explained that:

... encouraging and recommending particular entries by name and directing them to other students worked quite well. When I read a good one, I would say “oh, that was very good, everybody, I hope you’ve read so and so’s, I like what she did here.

She explained that when students were misunderstanding ideas or were confused she used a similar strategy, explaining that when “I felt that they had the wrong end of the stick, I’d direct them to further reading or someone else’s comments.”

I suggested to Joan that if she had taken that particular class on campus, then perhaps she would have seen her role as being different. Although she initially agreed, she did also feel that “in lots of ways it’s much the same,” the main difference being that one group, as in her online class, write comments and the other group, as in her on-campus class, discuss them verbally. She explained that when she took on-campus classes, she set up discussion groups within the classroom and she would just go round the room and join in discussions when required. That way she was able to see “whether they had got it or not.”

On further questioning, Joan admitted that it could be difficult to ascertain online who was understanding and who was struggling. “Some can get it, and some can’t. But sometimes, the ones who can’t, you don’t see them.” She was not able to

give any examples of how she might be able to support struggling students. She felt that on-campus students had more opportunity to benefit from “collegiality and all of those things that come from being at a university. And I think they probably do pick up on more than an isolated online student.” She felt that the on-campus students were able to get support from one another when they were confused, by having conversations over a coffee or in the hallway after a class. Joan was unclear about the opportunities her online students had for peer support.

Although Joan had stated a belief in encouraging students to be independent learners and that she saw her role as a facilitator rather than tutor, a perception matching her 64 posts across the 12 weeks of the study period, she considered that she had “spent a lot of time on that unit... a lot of time!” She felt that the job was far too big to be effective over a 12-week teaching period. She continued by saying:

... I would spend - you're supposed to only spend, what, an hour a day or something. Well that would be just answering emails, um, writing, you know - doing that sort of thing. Then you've got to go in and have a look at everything and comment on the discussion boards. I thought it was far too big really.

She felt that she had too many emails to respond to and often:

... it would be the same ones - but I guess you build up a sort of a relationship too, in a sense. I mean I would get an email say once a week from a particular person and it would be um, a little tiny query. You know, is this right or is this...?

These data suggest that Joan had allowed her students to use email to communicate with her rather than the preferred online discussion model. She explained that one Christmas she felt that she was spending such a lot of time responding to her students that her family noticed it, commenting, “Mum! What are you doing? You’re always working.” She had to agree with them “Yes I am. It’s true.” Joan obviously used her teaching time allocation within the role in individual conversations with her students, which would take much more time than one post

responding to many students would take on her discussion board.

Joan acknowledged that she felt that a large part of her role was taken up with encouraging, acknowledging and reinforcing (17 posts in this area). She recognized that this type of involvement “goes against the nature of the course” but felt that was “really all I had time to do.” She admitted that she had not really contributed to any great extent in any other ways. In spite of this, she did feel that she had contributed to student achievement and that “Otherwise I would feel totally inadequate, I think. If I couldn’t do that, I would feel like I hadn’t achieved much.”

I wondered if perhaps the large group of 75 students had something to do with her online teaching style. Although Joan had already mentioned that she felt that a group of 75 was “far too big to adequately motivate and direct,” she did not think that impacted on her style of teaching. Nevertheless, she confessed to thinking, when she had first started in the role: “If I’m to motivate this group of 75... phew”, she continued “but of course it didn’t really happen. I can’t say they were all active. Some, I have to say, don’t even turn up. So in reality it was never 75.” She felt that the number of active students would have been “closer to 45.” As identified in Table 8.1 Joan’s estimation of active students was quite accurate, as a maximum of 39 students were active on her discussion board in any given week. However, this was in the first week of the unit; by week 12, only four students remained active.

Research Question Three

What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

As indicated in Table 8.1, 64% (41 of 64) of Joan’s online comments were related to direct instruction.

As discussed in earlier case study chapters, direct instruction is

contextualised as tutors sharing their subject matter knowledge with their students, evidenced by diagnosis of comments for accuracy and understanding, injection of additional sources of information and involvement in discussion that scaffolds learners to new levels of understanding, and provision of explanatory feedback. The following table (Table 8.4) identifies how much of Joan's discussion was dedicated to these types of posts, and includes Joan's examples.

She posted on five of the seven indicators, almost half on presenting of content or questions, and nine in which she encouraged a focus on specific issues. According to Anderson et al. (2001), direct instruction is most often associated with content issues. It is interesting to note that Joan felt very comfortable with the content of this unit, and this could explain why this area held the largest percentage of her postings. Nevertheless, 41 posts is a relatively small number of postings over a 12-week period.

Table 8.4
Frequency of posts (Joan) – Direct Instruction

Indicators	Frequency of posts	Examples
Present content/questions (3/1)	19	<i>Yes a good comment but think about Piaget's schemas and how knowledge is acquired. Through the process of assimilation and accommodation and equilibrium children's schemas develop. Can you see a connection here? (week 2)</i>
Focus the discussion on specific issues (3/2)	9	<i>Consider the principles of assessment and comment. What is being assessed is very important to understand. To what end do the results make a contribution. These are questions that need to be considered (week 10)</i>
Summarise the discussion (3/3)	3	<i>Hello group 2. I have read most of your postings and some very good understandings have been made. When making direct quotations don't forget to include the page number. Try to think further and look at the implications for the teacher/classroom. This will make it more relevant and it will assist you when writing your assignment 2. What would be the key concepts you should consider. Scaffolding would be just one for example. Keep up the good work and keep sharing your understandings (week 2)</i>
Confirm understanding through explanatory feedback (3/4)	0	
Diagnose misconceptions (3/5)	6	<i>Consider the age group (6/7/year olds) in terms of attention span and lack of direction as to how to write a poem etc. Would they understand how to structure a poem, create rhymes etc. How long does the average lesson for grade 2/3 have with teacher direction? (week 4)</i>
Inject knowledge from additional sources (3/6)	4	<i>Hello Julia. Consider the principles of assessment and comment. Think about what is being assessed. This is very important to understand. To what end do the results make a contribution. These are big questions that need to be considered. (week 10)</i>
Responding to technical concerns (3/7)	0	

During her interview, Joan was not surprised to be informed that the majority of her posts were about direct instruction, stating: “well that’s what I saw my role as.” Joan was questioned as to whether this set-up suited her and whether she would have liked more ownership of content or potential to provide further resources. She responded with a vehement “No. No! I actually thought that this was a fabulous unit and didn’t need any more.” She admitted that she had adapted much of the content and activities over to her on-campus classes, fully agreeing with how it was set up. Joan loved the thinking behind a weekly journal that students had to write, record and share with others: “What do you think now? Read, Learn! Now how do you see it differently?” She explained that she felt that this was “putting into practice what the whole unit was about”, and that there was little requirement for her to be a part of that or to add anything to the process.

Research Question Four

Which teaching presence components do tutors believe are important in supporting learning?

Joan had a wide experience within other units of similar content, and said that she had really enjoyed working within this content area. Her style of teaching suggested a preference for putting all the information out there, letting the students investigate it and allowing them to come to conclusions. When one student was obviously clear in their understanding of a concept, she encouraged other students to read those posts. She did not add any additional information or supporting materials as she felt that everything that students required was available to them within the unit. Although stating that she was extremely busy with students, there was little evidence of this within the framework of the discussion board, and as I had no access to email conversations, it was not possible to determine the amount of time she spent

emailing students personally rather than the preferred and more time-efficient discussion board postings.

Research Question Five

Which factors impact on Joan's ability to provide a visible online teaching presence?

Joan's lack of technology skills appeared to have had an impact on her role. She had tried splitting her group of students into smaller groups but she stated that it hadn't worked. She admitted, "Oh that was a disaster, actually." She explained what had gone wrong. Tutors had access to each other's groups and frequently used this as an avenue for viewing good practice and to share ideas. Following someone else's process, she had broken the larger group into three smaller groups.

I followed one of the other tutor's lead and I'm not sure whose it was, I thought oh that sounds really great so I did exactly what she did, and put them - and it may have worked for her, but they wouldn't get onto the discussion board or talk to one another, so one group just had nothing on it eventually. And the other two weren't much better and yet, they would go into the discussion board as a whole group.

It appeared that Joan expected the groups to operate by themselves with little guidance and support from her. She could not identify what had gone wrong but was sure that she "wouldn't do it again." In her interview, she speculated that the failure had been something to do with her lack of technology skills as she really was unsure if she had even organised the groups properly.

Discussion of Joan's Beliefs and Teaching Presence

This chapter presented a case study of Joan's online tutoring. The chapter concludes with a brief overview of Joan's case as it relates to the research questions.

Research Question One: What proportion of the online discussion is characterised by teaching presence examples of instructional design and organisation?

Joan had only one post within this element, but as identified in previous case studies, there was no expectation from any of the off-campus sessional tutors (including Joan) to be involved in the planning or design of online units.

Research Question Two: What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

Joan had 22 posts within this element, with the majority within the indicator of encouraging or acknowledging student contributions. Although admitting that this was not the ideal goal for an online tutor, she also explained that this was all that she could do within the time available. The data suggest that she allocated most of her time to individual email communication, which was not the suggested model. She had been encouraged to use the discussion board where the communication would be one-to-many rather than her model of one-to-one correspondence.

Research Question Three: What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

The majority of Joan's overall discussion board posts were in this element. This highlighted Joan's previous experience with this curriculum area, as most of her posts were about providing content support.

Research Question Four: Which teaching components do tutors believe are important in supporting learning?

Joan had stated that she believed the role of tutors was to facilitate the acquisition of learning and to provide the opportunities for the learner to achieve understanding, and this was certainly the model that she presented within her case study. She believed that everything that students required was included within the

course materials, and that her role was to facilitate the learning journey for them by encouraging them to be independent learners. She believed that the best way to do this was in highlighting the contributions of successful students (those who were understanding the materials and providing discussion board posts to demonstrate this) as role models for others who were not so clear in their understanding.

However, she admitted that she really had no idea which of her students were failing to understand, nor with which specific aspects they needed her assistance or guidance.

Research Question Five: Which factors impact on tutors' ability to provide a visible online teaching presence?

Joan admitted that she had not expected to need such a wealth of technological skills to be an online tutor. Although her skills had improved, she confirmed that this was not one of her areas of expertise, but it did allow her to empathise with students who struggled with this aspect of online learning. Because she felt that this was the easiest way to support her students, she described how she used the medium of email rather than the discussion board, which would account for the scarcity of her posts relative to other tutors.

Applying the categories of Berge's roles in online teaching (1995), Joan had adopted a facilitator role rather than a teaching role.

Summary of Chapter

This was the final chapter in the set of four case study chapters. It provided data and analysis from Phases Two and Three about Joan's perspective on what it means to be an online tutor. In Chapter Nine I review and compare the data I collected from Mario, Leanne, Nelle and Joan to address the research questions from the combined perspectives.

CHAPTER NINE

Case Study Comparison and Data Analysis

In Chapters Five, Six, Seven and Eight I outlined, according to individual tutor data and perspectives, what it means to be an online tutor. In Chapter Nine, I review the data from the previous chapters, specifically contrasting the case studies of the four tutors - Mario, Leanne, Nelle and Joan. I then address the research questions from the combined perspectives of the four tutors. The chapter concludes with a pedagogical framework formulated from my analysis.

The chapter begins with a summary of the data presented in Chapters Five to Eight, and then presents quantitative information about tutor posts within and across the teaching presence indicators as defined within the COI framework (Garrison et al., 2000). This represents a comprehensive overview of what it means to be an online tutor within a first-year unit of an undergraduate pre-service teaching degree from the perspectives of these four case study tutors.

Profile Overview

The four case study tutors were of very different ages and career stages (a few years of teaching experience versus nearly 30 years); I purposely selected them to ascertain if there were commonalities despite these variations. All four had gone into teaching straight from high school or shortly afterwards, and at least for three of them, family powerfully influenced their choice of career. Two of the tutors had high school teaching experience and two had a primary teaching background. All four tutors were strongly committed to their families as well as to their work, and consequently welcomed the flexibility and opportunities that online teaching gave them.

These four tutors demonstrated a range of beliefs about teaching in general

and teaching online in particular. Their different backgrounds and experiences impacted on the way that each saw and dealt with the day-to-day responsibilities of being an online tutor within a first-year undergraduate teacher education course. My analysis demonstrated that they had adopted four different ways (according to Berge, 1995) of dealing with their roles: Mario, the unit coordinator, adopted a managerial role; Leanne, the most experienced and with the most background content knowledge, adopted a pedagogical role; Nelle a mother of young children and with a background in primary teaching, adopted a social role; and Joan, the oldest and with most experience in tertiary teaching, adopted a facilitating role. Although Berge suggested these roles as necessary in conjunction with one another in the online environment, in the main, for these tutors, these roles constituted their style of teaching.

It was clear from the data that none of these tutors had attempted to make any of the teaching of the unit their own. They all used the materials provided exactly as created by the campus-based unit developer. There had been little opportunity for any of them to give feedback on the activities or assessments, but none of them saw this as a problem. Although each tutor raised concerns over the size of the group (75 students) they had to teach, they accepted, from previous experience, that after the first few weeks, a major drop-off in student discussion board activity would occur. Whilst they all agreed that it would be preferable if students continued to engage, they recognised that some students succeeded without this engagement.

All Elements of Teaching Presence within COI

The following table (Table 9.1) contains selected data from the discussion boards of the four online tutors. Within and across each of the three elements of teaching presence – instructional design and organisation, facilitating reflection and

discourse and direct instruction – Table 9.1 shows the number of active students, the percentage of the total student cohort, and their posts over the 12-week study period. It also presents the number of posts made by the four tutors and how they were allocated across the three elements.

Table 9.1

Student/Tutor Posts Within Each of the Three Elements of Teaching Presence

Week	Number of active students	Total posts	Number of student posts	Number of tutor posts	I.O.	F.D.	D.I.
Week 1	152 (51%)	441	382	59	7	32	20
Week 2	112 (37%)	352	256	96	1	45	50
Week 3	98 (32%)	319	249	70	1	36	33
Week 4	78 (26%)	249	178	71	2	34	35
Week 5	62 (21%)	98	76	22	0	9	13
Week 6	52 (17%)	141	119	22	0	15	7
Week 7	53 (18%)	142	107	35	0	22	13
Week 8	29 (10%)	56	37	19	0	8	11
Week 9	16 (5%)	39	30	9	0	4	5
Week 10	15 (5%)	34	29	5	0	4	1
Week 11	27 (9%)	76	66	10	0	10	0
Week 12	15 (5%)	38	35	3	0	3	0
Total posts over 12 weeks		1985	1564	421	11	222	188
Posts as percentage		100% of total posts	79% of total posts	21% of total posts)	2% of total tutor posts	53% of total tutor posts	45% of total tutor posts

Across the four tutor groups, 300 students were enrolled for the study period.

Table 9.1 shows that the week with the largest number of active students online was the first (with only around half of the enrolled group posting). By the final week only 15 students remained active, with 35 posts, and their tutors making only three posts.

The following Figure (9.1), expresses these figures in graphical form.

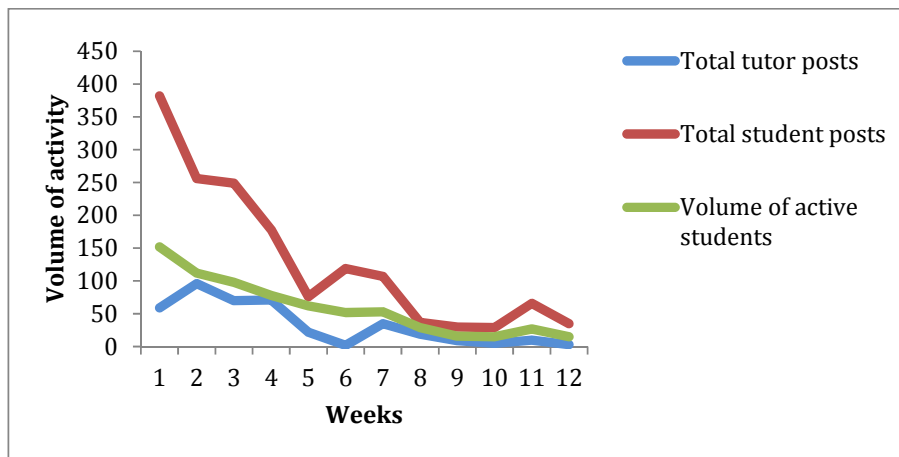


Figure 9.1. Number of Active Students, Student Posts and Tutor Posts over the 12-week study period.

This reduction in student and tutor participation requires investigation. All four tutors recognised this phenomenon in their groups, as did the focus group tutors outlined in Chapter Four.

The four tutors in my study identified a range of reasons for the participation pattern:

- tasks were not open-ended enough to promote discussion;
- students were being pragmatic and devoting more time to focus on their assessments rather than on the discussion board; and
- students did not have the skills required for academic writing and had dropped out of the course.

Previous research actually provides some likely reasons for lack of participation. As highlighted by McKenzie and Murphy (2000), online discussion groups need to provide evidence of their value to encourage students to participate. The literature supports the proposition that learning is done best through collaboration with others (Bento et al., 2005; Salmon, 2013), with students constructing their knowledge through interactive engagement with content, their peers and guided through the process by their tutor (Garrison et al., 2000; Pawan et al., 2003). Additionally, for many, this collaboration needs to be part of an authentic

learning experience where interactions have clearly defined guidelines (Edelstein & Edwards, 2002), and to be focused on a specific direction or be part of solving a real-world problem (Herrington & Kervin, 2007; Lombardi, 2007). I found little evidence that my four tutors had provided this guidance, or indeed had the opportunity to do so. Although all four tutors recognised that some students felt isolated in their online study, they were not aware of any strategies that would assist students to feel part of a community (Johnson & Johnson, 1996). Although most of their posts were confirming or encouraging, they were most often closed responses to students rather than the types of posts that would support engagement and discussion.

As identified through my exploration of social constructivist theory in Chapter Two, knowledge construction occurs when groups of people work together to solve problems. This requires collaborative engagement within social contexts. However, the four tutors stated that the types of activities that students were asked to complete online (mostly answering a question on the topic for the week) were not conducive to collaborative discussion. This point was made in the case study chapters and in the Phase One – Focus Group chapter, which described tutors' recognition that students needed encouragement to interact through open-ended tasks rather than just post ideas. Additionally, as highlighted earlier, the tutors had not been encouraged to participate – nor did they demonstrate any interest – in the adjustment of any of the weekly activities. Instead, as a strategy for learning, these tutors tried to engage their students by encouraging and praising their posts, rather than through the provision and sharing of ideas that would allow students to come to their learning from a range of perspectives and problem-solving opportunities. As identified, first-year students needed to be encouraged to conceptualise their own understandings, construct new understandings through engagement with the learning

tasks, and then be given opportunities to test their new understandings through conversations with peers and tutors. I had no way of establishing whether the students were working with their peers in other social networking sites to build up their knowledge, but they were certainly not engaging extensively within the Blackboard site, nor was there any evidence that their tutors were part of the process.

As highlighted in Table 9.1, over the 12-week study period, 21% of the posts across the four discussion boards were made by tutors and 79% by students.

Tutor posts varied week by week. Figure 9.2 shows the variation across the 12 weeks of the study period.

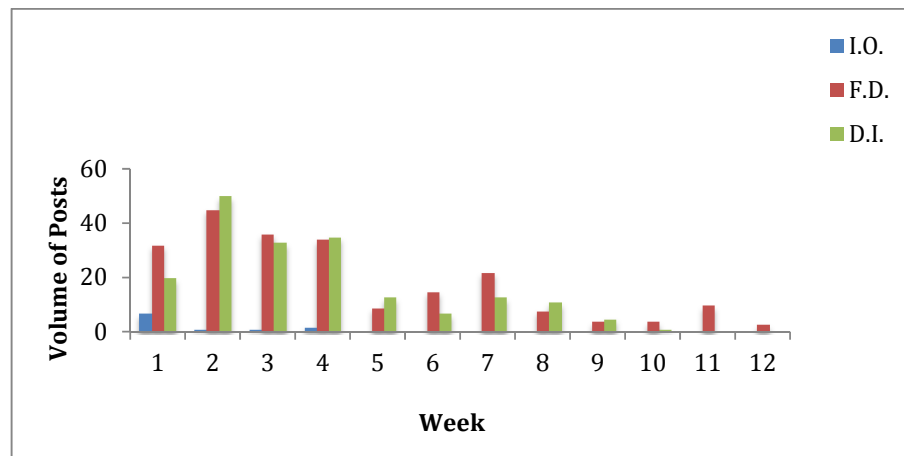


Figure 9.2. Tutor posts Across the 12-week Study Period Within each of the Three Elements – instructional design and organisation (I.O.), facilitating reflection and discourse (F.D.) and direct instruction (D.I.)

Figure 9.2 confirms that tutors' engagement with students was minimal after week seven of the unit. It should be remembered that two of the tutors recorded no discussion board activity for weeks nine and ten because their students were involved in a separate blogging project. Although this may have reduced student involvement in the last few weeks of the study, all four tutors had minimal discussion board participation in the final weeks.

In the following sections I address the five research questions in relation to

the combined data for the single group of four case study tutors.

Research Question One

What proportion of the online discussion was characterised by teaching presence examples of instructional design and organisation?

For this group of tutors, just 2% of posts were characterised by teaching presence examples of instructional design and organisation. Table 9.2 shows the numbers of posts within the individual indicators of this element. The examples given for the individual indicators are Garrison et al's (2000).

Table 9.2

Tutor Posts Across the Instructional Design and Organisation Indicators

Indicators	Frequency of posts
Setting curriculum (1/1) e.g. <i>"This week we will be discussing..."</i>	5
Designing methods (1/2) e.g. <i>"I am going to divide you into groups and you will debate..."</i>	0
Establishing time parameters (1/3) e.g. <i>"Please post a message by Friday..."</i>	0
Utilising the medium effectively (1/4) e.g. <i>"Try to address issues that others have raised when you post..."</i>	2
Establishing netiquette (1/5) e.g. <i>"Keep your messages short..."</i>	0
Making macro-level comments about course content (1/6) e.g. <i>"This discussion is intended to give you a broad set of tools/skills which you will be able to use in deciding when and how to use different research techniques"</i>	4
Totals	11 (2%)

Of the three components of teaching presence, according to Swan and Ice (2010), instructional design and organisation is the one most likely to be performed exclusively by the instructor. Swan (2002; 2003) found that these types of activities were particularly important since clear and consistent course structure that supports engaged instructors and dynamic discussion was the most consistent predictor of successful online courses.

In this study, this macro-level structure and process aspect of teaching presence was the element least used by the tutors. This was not a surprising outcome.

As identified in the literature review, the role of tutor varies tremendously within this element. As described by Anderson (2004), at one end of the continuum are tutors working entirely with pre-prepared content created by another academic, at the other are those with total responsibility for preparation of the content and the teaching. The group of tutors I studied fell within the first category: all the content and activities were created by on-campus academics. This particular online unit, one of 32 units of an undergraduate, pre-service teaching degree, had over 2000 students located across Australia and internationally. In order to manage this cohort, it was essential to establish and maintain teaching standards across a large teaching team. It was thought that allowing individual tutors to add their own materials would risk students becoming overloaded with content and create inconsistencies across the unit as well as across the delivery modes. Tutors were advised against making changes to materials or activities by the on-campus staff who had designed the units, and were discouraged from giving students supplementary links to online resources without checking with the unit coordinator.

As identified in Table 9.2, of the 11 posts in this element, the four tutors made five posts about setting curriculum, two about utilising the medium effectively and four about making macro-level comments about course content. These posts were intended to make students feel welcome and supported with some initial explanatory information. If these tutors had been given some opportunity for involvement in unit development and design, I am confident they would have made many more posts within this area. However, when the three sessional tutors were asked if they would have liked more involvement in this aspect of the teaching role, they responded negatively, saying that this was not an area in which they were interested in developing any expertise or investing any time. Leanne, Nelle and Joan

all saw their roles as being part-time, and teaching not viewed as their main role in life. Leanne's online business was her main professional focus, Nelle had a young family, and Joan was winding down her work commitments. Although Mario was on a three-year contract, he too had a young family and was involved in study, and did not believe instructional design and organisation to be part of his role. He had however, moved some of the content around in an attempt to make the unit more streamlined and comprehensible for students. Supporting the focus group findings, each of these tutors recognised the advantages of being able to work online, in that it offered flexibility of time and place that an on-campus or in-school teaching role could not, and unlike the school teaching role, they believed that it did not require any planning or preparation.

Research Question Two

What proportion of the online discussion is characterised by teaching presence examples of facilitating reflection and discourse?

For this group of tutors, 53% of online discussion was characterised by teaching presence examples of facilitating reflection and discourse. The following table (Table 9.3) shows the total tutor posts within this element across all of the indicators. The examples given for individual indicators are those suggested by Garrison et al. (2000).

Table 9.3

Tutor Posts Across the Indicators Within Facilitating Reflection and Discourse

Indicators	Frequency of posts
Identifying areas of agreement/disagreement (2/1) e.g. "Joe, Mary has provided a compelling counter-example to your hypothesis. Would you care to respond?"	3
Seeking to reach consensus or understanding (2/2) e.g. "I think Joe and Mary are saying essentially the same thing."	4
Encouraging, acknowledging or reinforcing student contribution (2/3) e.g. "Thank you for your insightful comments."	159
Setting the climate for learning (2/4) e.g. "Don't feel self-conscious about 'thinking out loud' on the forum. This is a place to try out ideas after all."	10
Drawing in participants, prompting discussion (2/5) e.g. "Any thoughts on this issue? Anyone care to comment?"	46
Assessing the efficacy of the process (2/6) e.g. "I think we are getting a little off track here."	0
Totals	222 (53%)

Garrison et al. (2000) conceptualised this element as the means by which students are encouraged to engage and interact in ways that build upon the information that is provided, so one could expect this to be a large component of the discussion posts of these online tutors. This was the case, with more than half of the four tutors' posts being within this element. The indicators within this element identify areas such as sharing meaning, identifying areas of agreement and disagreement, and seeking to reach consensus and understanding. This element is not about encouraging conversation for its own sake, rather ensuring and encouraging relevant and appropriate responses and the links to other posts. The tutor's role within this element is to find an appropriate level and balance of control that supports discussion while allowing students to develop the skills required to take responsibility for collaborative construction and understanding. As a former coordinator of this program, I know that it requires a high level of skill and experience to master such a balance and a great deal of training.

This group of tutors posted 222 comments within the element of facilitating reflection and discourse, with by far the largest amount of posts (159, or 72%) being identified as encouraging, acknowledging, or reinforcing student contribution posts

and making up 38% of all their posts. This is of course an important teaching strategy for tutors, particularly when working in a first-year unit with many students studying at university level for the first time. It is important to examine the number of posts relating to this element in greater depth.

Earlier research (see, for example, Picciano, 2002; Rovai, 2005; Swan & Shih, 2005) found that for students to work effectively online there is a need for community or social presence to develop so that students feel comfortable communicating and developing their knowledge with their peers. In my research, I expected that this group of tutors would see this as a large part of their role. Within their individual case studies, they agreed that it was important to provide a positive and supportive learning environment, and that it was important to provide prompt replies to posts. However, my data suggest that this strategy did not encourage students to become engaged in the discussion, as many of the comments made by tutors in the focus groups and the case studies highlighted this as an area of concern. This is not surprising in light of the fact that only 21% of posts within this element (and only 11% of all posts) were identified within prompting discussion, and very few or no posts in indicators other than encouraging, acknowledging or reinforcing student contribution. Moreover, one of the case study tutors (Leanne) made 32 (70%) of the 46 posts for this indicator.

As identified in the literature (see for example Anderson & Dron, 2011; Barab & Duffy, 2012; Zenios, 2011), such learning is an active process, with students needing assistance in understanding that they need to be responsible in the process (Nicol, 2010). They also need to understand that collaboration within the group of learners has the potential to share and advance the knowledge of the whole group (Fisher et al., 2002). Within the online environment this support is provided

through dialogue with tutors and fellow learners. Tutors who spend too much time providing posts that do not lead students anywhere – such as “well done”, “great work”, “love this” – cannot also produce posts that encourage students to think critically and meaningfully (Duncan, 2007; Laurillard, 2007; Moule, 2007). It is clear that tutors should lead students to consider different perspectives, provide challenging questions, suggest problem-solving responses, and focus and deepen the dialogue (Ellaway et al., 2006; Nicol & MacFarlane-Dick, 2006). Unfortunately, this process was not evident in the data from the four discussion boards which formed the basis of this study. Although Leanne, as the main contributor within the encouraging discussion aspect of this element, had put in a lot of effort in an attempt to get discussion happening, she had been unsuccessful; she had no explanation for this, other than attributing it to a lack of open-ended questions, and many students’ apparent lack of commitment.

Research Question 3

What proportion of the online discussion is characterised by teaching presence examples of direct instruction?

Although it has been acknowledged that the teaching role is no longer one of disseminating knowledge (Coates, 2006) neither is it one of merely facilitating interaction (Collison et al., 2000). Along with the sharing of content knowledge, this element contains indicators of examination of the student discourse and the efficacy of the educational process through the use of a range of assessment strategies and feedback options. To do this effectively content knowledge and pedagogical expertise are essential (Swan, 2010), and tutors must provide both (Arbaugh & Hwang, 2006). As Garrison (2011) has highlighted, and as outlined within Chapter Two, if disciplinary expertise is missing or minimal students’ learning will suffer.

This of course, is not limited to the online environment.

For this group of tutors, 45% of online discussion was characterised by teaching presence examples of direct instruction. The following table (Table 9.4) presents the tutor posts within this element across all of the indicators. The comments used to identify the indicators within the table are those suggested by Garrison et al. (2000).

Table 9.4
Tutor Posts Across the Indicators Within Direct Instruction

Indicators	Frequency of posts
Present content/questions (3/1) e.g. “ <i>Bates says ...what do you think?</i> ”	74
Focus the discussion on specific issues (3/2) e.g. “ <i>I think that’s a dead end. I would ask you to consider... ”</i>	21
Summarise the discussion (3/3) e.g. “ <i>The original question was...Joe said...Mary said...we concluded that...We still haven’t addressed...</i> ”	8
Confirm understanding through explanatory feedback (3/4) e.g. “ <i>You’re close, but you didn’t account for ...this is important because...</i> ”	26
Diagnose misconceptions (3/5) e.g. “ <i>Remember, Bates is speaking from an administrative perspective, so be careful when you say...</i> ”	47
Inject knowledge from additional sources (3/6) e.g. “ <i>I was at a conference with Bates once, and he said...You can find the proceedings from the conference at http://www...</i> ”	6
Responding to technical concerns (3/7) e.g. “ <i>If you want to include a hyperlink in your message, you have to...</i> ”	6
Totals	188 (45%)

For the direct instruction element, I identified 26 posts within the confirm understanding through explanatory feedback indicator and 47 posts within the diagnose misconceptions indicator. As identified in my review of the literature in Chapter Two, although students consistently demand high-quality feedback, they often struggle to understand it (Nicol, 2010). It is essential that online teaching staff members are clear and targeted in the feedback that they offer their students. Feedback should be seen as a feed-forward mechanism, as a means of supporting learning, inseparable from the learning process and used as a tool to improve the quality of the learning (Duncan, 2007).

I found that this group of tutors posted in ways that combined two indicators (explanatory feedback and diagnosing misconceptions), as in this example from

Nelle's posts: *...I'm just looking at referencing today and noticed that your in-text referencing isn't quite right. You need to follow the APA guide carefully as you have the page number and date of publication mixed up and also you are missing the necessary punctuation. Also the title needs to be in italics* (Nelle, week 2), where she identified a misconception about referencing protocols and in the same post, provided explanatory feedback by giving the required format to the student. The same approach is discernible in Joan's post:

Consider the age group (6/7/year olds) in terms of attention span and lack of direction as to how to write a poem etc. Would they understand how to structure a poem, create rhymes etc. How long does the average lesson for grade 2/3 have with teacher direction? (week 4)

and in Leanne's:

I've added where you need references in your first few points below. (week 7)

and in Mario's:

If you were to do an experiment with a 3 year old child that was targeted way beyond their current stage of development, the child may not yet be at a place where they will be able to understand the lesson. No matter how many times you repeat it. (week 2)

To illustrate how these four tutors communicated with their students as a group, I combined the two indicator post figures. They total 73 posts (39% of all tutor posts in this element and 17% of the total posts across the unit). The present content/questions indicator had the most posts, with 74 posts (39% of tutor posts in this element and 17% of all posts across the unit). Twenty-one posts (11% of tutor posts in this element and 5% of all posts across the unit) were classified as within the indicator focusing the discussion on specific issues. Few or no posts related to the remaining indicators for this element.

As noted previously, for Garrison et al. (2000), *Direct Instruction* involves

the instructor providing intellectual and scholarly leadership in part through sharing subject matter knowledge with their students. This subject matter knowledge is crucial within this element, as tutors are expected to diagnose comments for accuracy of understanding, make links for student ideas, provide additional sources of information and guide the discussion in appropriate and fruitful directions allowing knowledge to be raised to new levels (Swan et al., 2010). Although all four tutors were qualified schoolteachers, only one could be considered to have deep content knowledge and none of them self-identified as online pedagogical experts.

Summary of Teaching Presence

The four tutors posted 421 comments across the three elements of teaching presence. Most of their posts were identified as being in four main areas of teaching presence. They are classified below into the four most common strategies these tutors used to support learning within their online discussion boards.

1. Encouraging or confirming student posts (within facilitating reflection and discourse) (159 posts - 38% of all tutor posts);
2. Promoting and developing discussion (within facilitating reflection and discourse) (46 posts – 11% of all tutor posts);
3. Presenting additional content or information (within direct instruction) (74 posts – 18% of all tutor posts); and
4. Diagnosing misconceptions and explanatory feedback (within direct instruction) (73 posts – 17% of all tutor posts).

It is particularly noteworthy that, for these four tutors, promoting discussion was the least prevalent indicator within their online teaching posts. Three of the four tutors had identified this as an area they continually tried to encourage, yet only one tutor, Leanne, demonstrated this in the types of posts made to students.

Figure 9.3 identifies the four main categories and their volumes across the study period within all three elements of teaching presence.

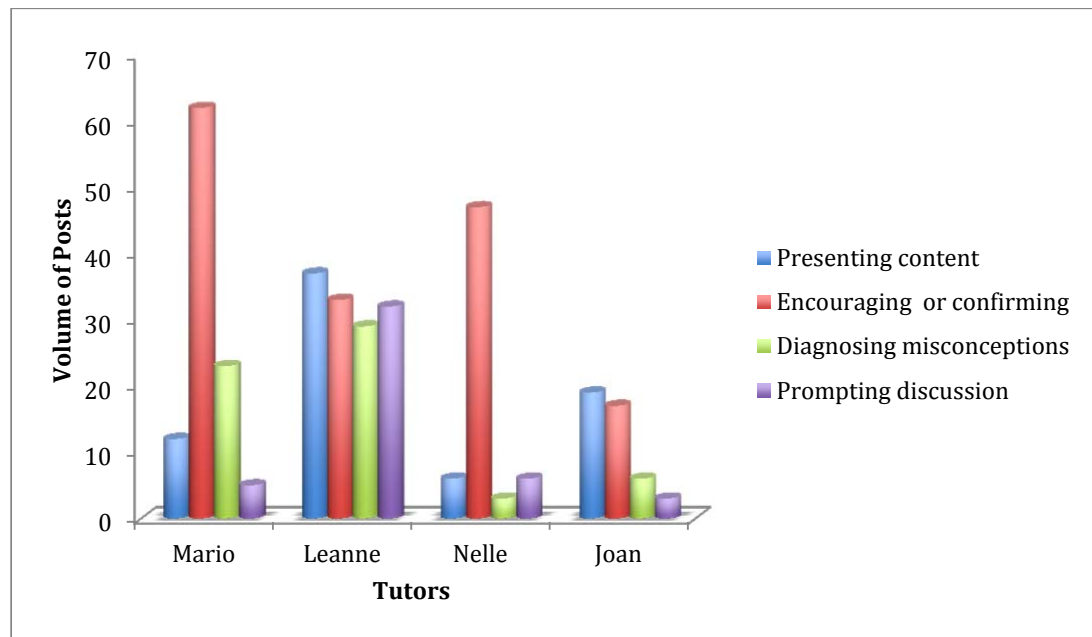


Figure 9.3. Number of Posts per Tutor Across the Four Main Areas

As Figure 9.3 shows, Leanne had the most evenly distributed volume of posts across the four main indicators. Mario and Nelle's posts contained very large proportions of encouraging or confirming posts, and Joan had nearly equal numbers of posts about presenting content and encouraging or confirming.

So far in this chapter, I have described the level of tutor support that was provided within the four tutors' discussion boards to address research questions one, two and three. I now provide an analysis of the data relating to research questions four and five. Although questions four and five were addressed separately within each of the case study chapters (Five to Eight), in this chapter they are addressed together. The rationale for this was to enable detection of incongruity between tutors' beliefs and practices.

Research Questions 4 and 5

Which teaching presence components do tutors believe are important in supporting learning, and which factors impact on tutors' ability to provide a visible online teaching presence?

In Norton et al's (2005) study of the variation between teaching beliefs and practices, it was found that although teaching staff espoused a belief in supporting their students' learning through solving problems, the style they demonstrated was knowledge transmission. This has been long identified as the distinction between espoused theory and theory in use (Argyris & Schon, 1974,). Although tutors may "talk the talk," they may not "walk the walk."

Mario's, espoused belief was about winning them over and providing quick and regular responses to student posts. Although he preferred to work in units where he had content knowledge, he did not see this deficiency as crucial to the learning process, believing that tutors could pick up the content along the way. He understood that his students were required to operate independently, with clarification from him as to whether they were on the right track. Mario had re-arranged materials within the unit to improve access for students, feeling that there was often too much information located in too many areas, and that this could cause unnecessary confusion. He believed that students should be given specific online tasks to complete that allowed them to practise what they would be expected to do within their marked assessments. Although expressing a belief in communities of practice where students operate within learning communities, he agreed that his model was one where students communicated individually or with one other person, mostly with the goal of passing the unit.

Leanne's stated approach was one in which she continually self-reflected by

asking herself how she could best help her individual students to learn. She identified content knowledge and pedagogical expertise to be crucial and believed that she demonstrated both. She stated that, although as a tutor at university her goal was to encourage curiosity and a desire to learn at a deeper level, she felt that her first-year students had a different focus. They were busy people who wanted a qualification; this meant that they had to prioritise, and many struggled with this. She believed that the course's open access structure meant that many students had false expectations around flexibility and what contribution was required. Although she knew that many students needed help in this area, she did not consider that this was part of her role within this unit and therefore there was little that she could do. Leanne believed that she had put a great deal of effort into assisting students to engage, but got frustrated when none of her tactics worked and said that some students did not take responsibility for their learning. However, although she suggested that the online activities in which students were asked to engage and discuss were not suitable for developing open-ended discussion, she had not tried to restructure any of them (nor been encouraged to do so) to improve participation rates, and her students continued to mainly operate independently of her and their peers.

Nelle focused on building relationships and being friends with her students. Her teaching philosophy stemmed from a particularly difficult year for her as a child with a strict, unfriendly teacher. She believed that her first-year students needed continuous reassurance and acknowledgement for their contributions to the discussion board. She also acknowledged that this, on its own, was not sufficient, and that the tutor should encourage further discussion and extend students' thinking. However, there was limited evidence of Nelle acting upon this belief within her

discussion board. She admitted that this was a skill that she would have welcomed some assistance in developing, particularly with those students who demonstrated inability in basic literacy and academic writing, and those who appeared to focus on the end result of passing the assignment. Nelle expressed a lack of confidence both in the content and in her ability to find useful and accurate supplementary materials for her students. She struggled to understand why some groups worked better than others, and admitted that working with me had assisted in her to reflect on her input and realise that she could have been more proactive with students who struggled to link theory with practice. Her main strategy in this regard was to outline for students what she had done in her school classroom.

Joan believed that university teaching was about facilitating learning with students who had a desire to learn. As a tutor with a background of teaching on-campus classes with very similar units, Joan saw her role as a guide who left students to work through their materials and directed them to other students' posts for confirmation or clarification. She believed that everything that students needed to achieve successful outcomes was available within the unit. She appeared to use email as a means of communicating with her students individually, rather than by encouragement of online discussion, suggesting that she saw this online learning process as simply being a version of the traditional distance learning courses that existed before the emergence of online courses.

As Kirkwood and Price (2004) argued, if tutors believe their teaching methods are based on their beliefs and perceptions of how to teach effectively, but they are not gathering any evidence for the success of what they are doing, this could block the creation and development of new ideas and strategies. Tutors need to reflect on their practice to examine the accuracy of their assumptions, and seek out

evidence that their practice is effective and be willing to change it as a result. None of these four tutors was able to highlight any evidence that their strategies were working, or that they had changed their practice in any way to support interactive learning. However, having someone question them about their practice, as in this research, was seen as an excellent way to encourage reflective development.

According to Moore (1997), distance education – or in this case online education – means not only a geographical separation of learners and tutors, but that the relationships that tutors have with their students are impacted by the distances between them. Certainly, the group of four tutors I studied felt that online tutors need support in understanding what this means and what strategies can be put in place to ensure minimum feelings of isolation and separation.

The tutors agreed that the end goal for students had to be achieving a pass mark in their assessments. This is confirmed in the literature: Boud (2007) stated that assessment tasks have a major impact on student learning and Ramsden (2003) argued that assessment defines the curriculum in students' eyes. Laurillard (2002) asserted that for learners, action without feedback is completely unproductive. Therefore, if students are posting to an online discussion and receiving no feedback, there is a danger that they will stop posting. However, it has also been recognised that many students do not understand how to make use of feedback (Hattie, 1987). Confirming research in this area, where teaching staff question the value of their feedback to the learning process (Duncan, 2010; Nicol, 2010; Price, Handley, Millar, & O'Donovan, 2010), participants in my focus group study and in the four case studies believed that their feedback was not being utilised effectively by students. There is a definite need to develop strategies that guide students on how to close any gaps between current and desired performance. It is crucial that tutors feel confident

in this area, and be given specific training that allows them to feed forward in ways that allow students to self-assess and monitor their own performance.

The chapter concludes with a pedagogical framework based on the findings of the previous research questions, thereby addressing the final research question:

Research Question 6

What pedagogical strategies can be implemented to enhance collaborative learning in online education programs?

Pedagogical framework

None of the four tutors had opportunities to be involved in course development, design of online learning activities or provision of supporting learning materials. If they had, this surely would have improved their interactions with their students, who in the main operated independently, with students and staff becoming increasingly disengaged with one another as the study period continued. They certainly demonstrated commitment to ensuring that students felt supported and encouraged, with 38% of tutor posts dedicated to this area. However, it appears that once the students felt safe and knew how to navigate through the materials and the requirements of the assessments, they chose to be independent learners and left the discussion and its opportunities to advance their learning. Although one tutor expressed belief in the strength of building and maintaining an engaged and interactive community of learners, the data did not demonstrate that this belief was translated into action, with only 11% of all posts dedicated to this aspect of teaching and no real evidence within the discussion board of any confidence or competence in doing so. For tutors to have an effective online teaching presence, there is a need for some essential elements.

Part of the online teaching role involves the provision of additional or

supplementary learning materials for students, but there also a student responsibility to self-source. Although students require praise and encouragement for engaging with peers and tutors, there is also a need to raise the online conversation to a higher level of engagement that supports the development of critical, reflective thinking through effective feedback and monitoring of the kinds of discussion that drives learning forward (Hattie & Timperley, 2007). To incorporate all these concepts into a single model, in Figure 9.4 I provide a framework that identifies required areas of support for online teaching.

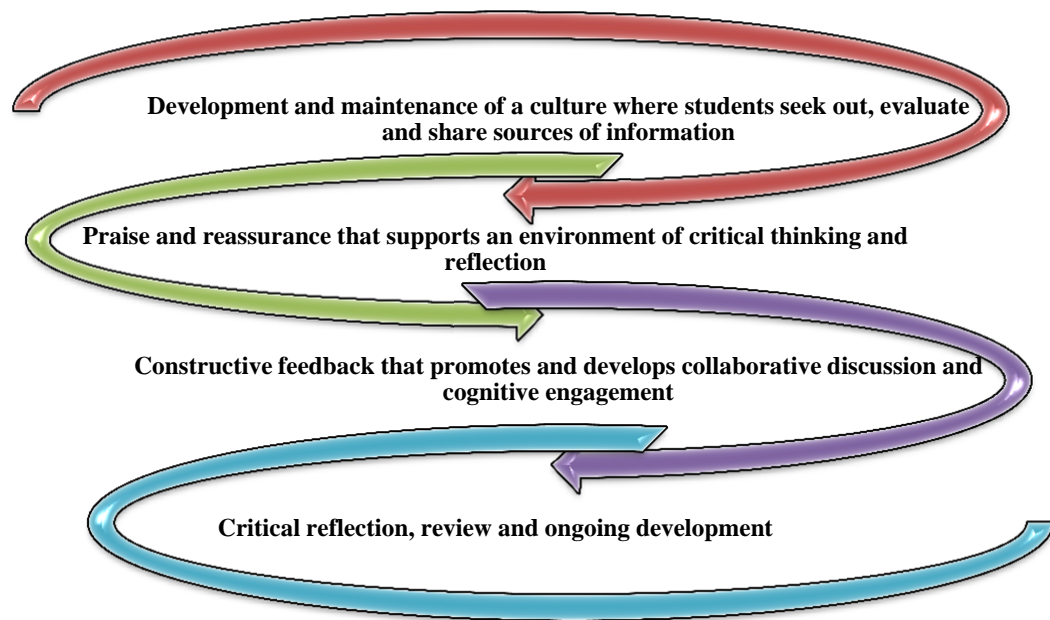


Figure 9.4 The Reflective Feedback Loop for Effective Online Teaching Presence that Supports, Develops and Enhances Collaborative Learning

The Reflective Feedback Loop presents the four crucial elements that are necessary for an effective teaching presence that supports online, effective, collaborative engagement in which student performance is improved. As shown, the final arrow is not complete as the following stage involves a return to a revised first stage in a model of continuous reflection and improvement.

1. **Development of a culture of identifying, evaluating and sharing resources.** Although not evident in my study, as outlined earlier, an important aspect of teaching should involve the provision of additional learning materials for students. However, in a world of freely available information resources, students need to be able to seek out, verify and connect with others to share information that supports their learning. Tutors are required to be actively involved throughout this process by creating authentic tasks that demand the use of these resources, ensuring the appropriateness of materials.
2. **Development of a community of critical reflective thinkers.** Although students require praise and encouragement for engaging with peers and tutors, a higher level of engagement is needed, one that supports the development of critical, reflective thinking. This requires training of students and staff to ensure successful outcomes for both groups.
3. **Effective feedback** and monitoring that promotes and develops collaborative discussion that drives the learning forward through cognitive engagement. However, this is not a process that exists in isolation, again this requires training for both staff and students.
4. **Critical reflection, review and development** to allow feedback from staff and students to impact on future development of both content and learning activities to assure quality and relevance.

These four elements are part of a cyclical process of a continuous reflection feedback loop, where the next stage would result in the identification and evaluation of resources that would then be at a higher stage of cognition. An essential element of the continuous process would be review and development. As stated earlier, for

the tutor participants there had been no input into the planning and development of the unit, and this impacted significantly on their performance. They had much to offer to a future iteration and it would be considered prudent to use their experiences as part of the ongoing review, modification and improvement of the units and would promote a deeper understanding and sense of ownership. Each aspect of this reflective feedback loop requires teaching staff who are committed and have had appropriate and ongoing professional training to enable continuous, critical monitoring and development of the program overall, as well as the individual units and the performance of teaching staff within those units.

Summary of Chapter

I addressed each of the research questions in this chapter. I compared the online teaching presence of the four main participants of this study, and compared the results of this study to those of other studies. As a direct outcome of my analysis I provided a framework (the Reflective Feedback Loop) that offers a model of support for online teaching through enhanced collaborative learning.

The following chapter, Chapter Ten, concludes this thesis by summarising the key findings and recommendations from the research.

CHAPTER TEN

Key Findings and Recommendations

This chapter concludes this thesis by providing the key findings of my research and the recommendations resulting from them. It begins with an overview of the study, then – using the conceptual framework that guided the study – I compare my study to the research literature, and provide recommendations.

Study Overview

My research provided new insights into the role of the tutor in supporting online student learning. I investigated a Western Australian University's Bachelor of Education Primary Degree, completed fully online. Drawing upon the COI framework (Garrison, Anderson & Archer, 2000), I examined the beliefs and practices of tutors and related them to the evidence of their engagement within an online teaching environment. I identified key literature in online teaching and explored the various dimensions of what it means to be an online teacher educator and provided a framework to highlight required elements for effective online teaching. I conclude by offering recommendations for ways educators can support the learning and preparation of pre-service schoolteachers who complete their courses in an online environment.

This research originated from my desire to investigate the beliefs and practices of contemporary online tutors. I adopted the teaching presence element of the COI framework (Garrison et al., 2000) as a lens to identify the issues involved in being a tutor in an online teaching degree. I presented the data using a case study approach to explain the beliefs that tutors held and demonstrated about their online teaching. The investigation was completed in three phases: focus group interviews; analysis of online transcripts; and individual tutor interviews, with key findings

being identified from each of the phases.

Phase One – Focus Group Interviews

It was important to establish if this group of tutors ($N=52$) had experienced similar problems with regard to online teaching and learning to those identified within the research literature. This first phase of the research identified a range of issues relevant to online teaching, but specifically related to the support of students learning through discussion board interactions. Eliciting their thoughts and beliefs about teaching and learning enabled me to place their pedagogical practices into the context of online learning, with the main objective being to collect information that would assist me to understand the dynamics of online communication from the educator's perspective.

In line with relevant literature (for example, Laurillard, 2003; Palloff & Pratt, 2011; Sims & Bovard, 2004), many of these tutors had come to their online roles with little relevant background or experience. Although the tutors in this study were, in the main, experienced schoolteachers, they were relatively inexperienced online tutors. Because previous literature (for example, Kanuka & Jugdev, 2008; Muirhead & Juwah, 2004; Saab, 2005) had identified student interaction as a crucial element within effective online learning environments, although one that was often not often demonstrated as fulfilling its true potential for active, cognitive engagement, the main focus of the conversation during the focus group interviews was interaction and tutor understandings of the term. As recorded in the literature (for example, Bento et al., 2005; Roblyer & Ekhaml, 2000), these tutors also used the words engagement and interaction as equitable/interchangeable terms. Interaction for these tutors was synonymous with active engagement, involvement in discussion, commitment to learning and motivation for study. It also emerged that it was a difficult and complex

aspect of their role that manifested in three different areas – with students, with their peers and with their families – with each area of interaction affecting the other two, and each area presenting both positive and challenging aspects. Findings about the three areas of interaction are outlined below.

Interaction with students

Online learning was identified as a teaching vehicle allowing both staff and students flexibility of time and place to make connections and build relationships. However focus group participants agreed that the development of community was important but difficult to implement because of time and distance factors, and that many first-year students required considerable guidance to ensure that they understood the value of student-student interactions rather than student-tutor question-and-answer sessions. Many students discontinued any interaction in the discussion board by around the halfway point of the unit, and tutors could not identify any strategies that had been successful in supporting or encouraging them to re-engage.

Interaction with peers

This was identified as an important aspect, in which tutors acknowledged that, like their students, they needed to feel that they were part of a community. They agreed that the potential for growth and development through professional engagement in a collegial environment was a crucial and welcome aspect of their role, and they enjoyed being part of a large group of tutors reflecting and continuously striving for improvement.

Interaction with families

This was an important variable, with time management a vital issue for many of the tutors. They reported that because students can access their online learning

anytime and anywhere, they had an expectation that their tutor should provide the same flexibility and be available whenever required. Clear expectations and boundaries needed to be negotiated.

Key findings

The findings from this phase of the research confirm the work of many previous authors (Anderson & Dron 2011; Conceicao & Lehman, 2011; Dowson & McInerney, 2003; Garrison et al., 2000; Northcote, 2009; Palloff & Pratt, 2011; Reeves et al., 2005; Reushle, 2005). They indicate that an interactive, engaged community of learners is an important component of an effective online learning environment. The development of such a community takes time, commitment and training for both tutors and learners, particularly when the learners are first-year students.

Phase Two – Discussion Board Transcripts

While the first phase of the research was aimed at the overall perspective of the teaching cohort, Phase Two was designed to ascertain the specifics of the online teaching role in more detail. This phase of the study was specifically related to the COI framework (Garrison et al., 2000) used to investigate the discussion board posts of four selected tutors. This framework represents a process of creating a collaborative-constructivist learning experience through the development of three interdependent elements of social, cognitive and teaching presence. Because I investigated tutors who were teaching students to be schoolteachers, I used only the teaching presence element of the COI framework. As explained previously, teaching presence is identified by Anderson et al. (2001) as the design, facilitation, and direction of social processes for the purpose of realising personally meaningful and educationally worthwhile learning outcomes. A coding template created by Garrison

et al. (2000, p. 4), to support systematic analysis of text-based transcripts was used to support the investigation.

Key findings

This phase of the study resulted in several key findings specifically relating to the three elements of teaching presence: instructional design and organisation, facilitating reflection and discourse, and direct instruction. Although each of the elements was represented in the tutor posts, the proportions varied with 2% of the posts relating to instructional design and organisation, 53% to facilitating reflection and discourse, and 45% to direct instruction. Although 19 indicators across the three elements are considered to be essential requirements for the development of effective learning (Anderson et al., 2001), the four tutors adopted only four teaching strategies when interacting with students: presenting information (18%), encouraging or confirming student posts (38%), diagnosis and explanation of misconceptions (17%) and promotion of discussion (11%).

A further finding from this aspect of the research was that analysing transcripts from a discussion board forum provides important and useful feedback that could be used as a strategy for ongoing improvement of a subject. The COI framework was found to be a useful gauge of teacher student interaction, and worked well in my analysis of how the discussion board worked. For example, the almost exclusive use of four (84% of all four tutor posts) of the possible 19 indicators clearly influenced the types of discussion that occurred within each of the boards. This is vital information to support professional development for online teaching staff.

Phase Three – Individual Tutor Interviews

In this third phase of the research I investigated the reasons for the proportions of online participation through individual tutor interviews and discussion.

Key findings

The conceptual framework, (specifically the structure of the headings within the framework), is used to present the findings from this aspect of the research, highlighting the existence of four prerequisites for an effective online teaching and learning environment. The tutor guiding the learning should provide (1) an active, visible teaching presence and should have expertise in both content and in online teaching (Berge, 1995; Garrison et al., 2001; Pawan et al., 2003), defined by Shulman (1986) as (2) pedagogical content knowledge, meaning tutors understand how their students learn and how best to support them. This expertise is demonstrated through (3) the building of collaborative communities of learning (Glazer & Hannafin, 2005; Rovai, 2002) that are developed through (4) the provision of effective feedback (Boud, 2007; Nicol, 2010; Ramsden, 2003) on student understanding and development, in ways that encourage deeper levels of understanding through collaborative engagement in authentic tasks (Herrington & Kervin, 2007) with a range of content, their peers and their tutors (Anderson et al., 2001).

In the next section I use the four headings to:

- identify effective online teaching prerequisites;
- establish whether they were evident in my data; and
- outline how their presence can be encouraged through the provision of recommendations within each of the four areas.

Prerequisite 1: Pedagogical Knowledge and Content Expertise

As previously noted the four main participants had a range of backgrounds, experiences, expertise, beliefs and aspirations for future development. Although all were qualified schoolteachers, only one had extensive tertiary teaching experience and only one had specific qualifications in the content area of the unit. Three of the four were sessional, off-campus members of the teaching staff who demonstrated no ambition to develop their positions into more permanent roles. Although each of the tutors articulated a range of beliefs around how students should learn, all struggled to put their beliefs into practice. One of the tutors had a postgraduate qualification in this field, another had worked in this subject area for several years, and a third had taught this unit several times previously, but this study revealed little evidence of pedagogical knowledge and content expertise within either the discussion board conversations or the interviews.

This is not to say that these tutors did not have content expertise. Two of the four had relevant content expertise and the other two tutors were not novices, but none of them provided any evidence that they had the pedagogical expertise to best support their students in spite of their content knowledge. This confirms findings in the literature identifying that to be an effective online tutor both content knowledge and pedagogical expertise are necessary (Koehler & Henrikson, 2011).

Recommendation 1a – Professional learning/development must be an essential component of the role of online tutor.

These tutors were offered professional training but this was not a compulsory requirement and although those who had been involved had expressed some benefit from it, others had identified gaps. This study has identified crucial elements to support such learning.

Recommendation 1b – *Online tutors and the academic on-campus team must develop and regularly update an online professional development program.*

This program could be provided through a variety of formats such as:

- Provision of case studies of best practice;
- Provision of “talking heads” who are experts in the online field;
- Synchronous discussions between tutors as a model of peer review; and
- Asynchronous online staff discussion forums

This professional learning should be a collaborative initiative within a professional learning community where tutors interrogate their practice reflectively, collaboratively and developmentally. This would constitute a supportive mechanism for all staff working across the three varieties of this degree – on campus, regionally and online.

Prerequisite 2: A Visible Teaching Presence that Ensures Students are Active in the Learning Process

Of the 300 students under the four tutors’ supervision, only 152 (just over 50%) were ever discussion board participants. By the final week of the study period, only 15 students, or 5% of the total, were active. Students posted 79% of the posts across the four discussion boards and tutors 21%. These percentages are similar to those measured in McKenzie and Murphy’s study (2000) of postgraduate students.

Universities should emphasise the social nature of learning, where students construct their knowledge through meaningful, reflective and critical interactions with others (Baker, 2010; Carmichael & Farrel, 2012; Herrington, 2007). For this to happen, students must take responsibility for their own learning. This study did not discover evidence of a visible teaching presence that ensured learners were active in the learning process. Although each of the four tutors – and the larger group of tutors

in the focus group study – regarded active engagement as synonymous with learning, they were unable to explain how to promote the value of engagement to their students.

Recommendation 2 – Make ongoing data collection and evaluation of engagement fundamental to course development and review.

Further research is needed into attrition among online students and to ascertain specific reasons for disengagement. I could not readily identify how many of the 300 students passed the unit, nor if students who were not actively posting accessed and benefited from the discussions. It would have been useful to know how many students were active in other social network sites where they had support networks. In future studies, these analytics should be part of the data collection and evaluation process.

Prerequisite 3: Evidence of the Building of a Collaborative Learning Community through Transparent Stages of Development

Although the development of a community of learners was identified as a crucial requirement for online learners in both the focus group interviews and in the individual interviews, both groups recognised that this was an area in which they had struggled to develop their abilities. Provision of support through encouraging statements was the content of 38% of the tutor posts, clearly highlighting that the tutors saw this as an essential component of their role. Whilst this support would very probably have encouraged students to feel welcome, it would have done little to develop a community of critical thinkers (Anderson et al., 2000; Glazer & Hannafin, 2006; Baker, 2010). The tutors needed strategies that would have allowed the development of higher-order thinking. Promoting of discussion is a crucial strategy for community building, but with only 11% of the discussion devoted to it, this study

revealed little evidence of collaborative community development within the discussion board conversations.

Recommendation 3a – *Create opportunities to develop expertise in the building of community, including specific training in the promotion of discussion.*

This should include development of strategies for highlighting the advantages of engagement for students and opportunities for tutors to provide feedback on planned and actual changes to the unit, and the course as a whole, particularly with respect to activities that worked well in supporting a community of learners.

Recommendation 3b – *Participation activities should be realistic, relevant and require collaboration in order to achieve the outcome.*

Many of the tutors surmised that the building of community did not happen because of the types of activities that students were asked to complete, with many questions being too closed to support collaborative discussion. As outlined by Herrington et al. (2007), authentic learning activities provide opportunities for engagement and meaningful learning at a deep level of cognitive engagement, and the development of such opportunities is essential; requiring training for both staff and students upon implementation.

Prerequisite 4: Evidence of Tutors Supporting Constructivist Learning through Interaction, Engagement and Feedback

The four tutors in this study reported that for the majority of their students, the focus was on the end result – successful completion of assignments and an overall pass for the unit, however, much of the tutors’ comments could be characterised as “vague praise” (Duncan, 2007, p. 273), and therefore ineffective. This study found no evidence of tutors supporting constructivist learning through interaction,

engagement and feedback through their discussion board activities.

As Oliver & Omari (2009) showed, students need to be taught how to participate effectively and must develop understanding of the value and purpose of online collaboration.

Recommendation 4 – *Online teaching staff need to become competent in the use of feedback.*

Specific training should be provided in the use of evaluative feedback, with students expected to be part of the feedback loop. Assigning of mentors/coaches to new tutors is a plausible training model.

Overview

New information and communication technology is having an incredible influence on education and learning, and these new tools should be part of a tutor's professional development toolkit and seen as an important aspect of lifelong learning. However, simply introducing new tools is not sufficient to create an effective learning environment: technology must be used in meaningful and effective ways. Technology should allow tutors to rethink and reshape their teaching, not just do old things in new ways. It is clear from some of this study's data that if tutors are not able to personalise and make teaching their own, they are unlikely to become familiar with the technologies in ways that encourage effective and reflective teaching and learning. Technology is not a replacement for human interaction. The processes that allow students to connect, collaborate and engage with resources, peers and their tutors are crucial components of their learning. Although much emphasis is placed upon learner engagement, this engagement is dependent upon active participation from learners *and* tutors. As part of the growth of online education, online tutor preparation programs are being developed and implemented.

However, since the development of these programs is in its infancy, there are few models to follow and little direction available for academic staff. It is important to understand the variables that affect student learning and those that impact on the role of their tutors.

I agree with Dymont et al. (2013) that it is difficult of coming to reach an authentic understanding of tutors' engagement in an online teaching environment. Teaching and learning are complex interconnected processes and the definitions of interaction are wide and varied. Interaction has emerged within this research as being synonymous with active engagement, involvement in discussion, commitment to learning and motivation for study. It has been identified as being associated with the building of relationships, development of communities and collaboration with others. It is connected to the design of a program and is promoted through online activities along with the nature of feedback and assessment. It has been highlighted as being a really difficult concept to manage for both staff and students and it is acknowledged that it requires a great deal of training and expertise in its implementation and development.

There is a risk that if pre-service teachers view their educational course as a means of gaining employment, and as students do not take on the role of active learners, then cognitive engagement and development can be minimal. To support students in coming to an understanding around what constitutes effective learning at the university level, continuous feedback and assessment should be seen by both students and their tutors as part of the learning process, allowing both parties to develop an awareness of how far the learning has progressed and how much more is required in its development. This requires learning tasks that are relevant – challenging students to be engaged and active, and providing opportunities for high

quality feedback that positively impacts on the learning.

Specific Contribution of this Research

This research complements other research using the Teaching Presence element of the COI framework (Garrison et al., 2000). It adds to the scholarly research and literature within the field, because this framework has not previously been applied to a first-year undergraduate pre-service teachers' learning environment. My study will improve online teaching practice through its unique analysis of the detailed case histories of four online tutors who discussed how they engaged with their students. It characterised the important relationship between beliefs and actual practice and outlined reasons for the identified dissonance. In addition, the study highlighted some crucial issues that require consideration in the design and development of online courses that encourage collaborative learning within their model. The study provided academic teaching staff with an evidence-based model of suggested practice, including relevant examples of how that practice can be supported through targeted areas for professional learning. Because of the growth of online learning within the Australian university sector, the results are relevant to the local and wider community where there is a recognised need for re-examination of current educational and training practices. My recommendations provide university educators with new insights into ways to support the learning and preparation of pre-service teachers who complete their courses in an online environment.

Avenues for Further Research

The main focus of this study was on tutors who worked in a first year undergraduate course for pre-service teachers. Further research would be useful to investigate students who are studying in a first year course such as this to ascertain

their view of the role of the tutor in supporting engagement in online teaching and learning.

Conclusion

Online education should be seen as a learning model that aims to support the development of the learner using well-researched instructional strategies. The development of faster, more portable and more powerful technologies allow ever-expanding flexibility of opportunity for higher education students and their tutors to study and teach, but the focus must remain on quality teaching that supports effective learning outcomes through supportive online engagement.

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Every reasonable effort has been made to acknowledge the owners of copyright material. I would be pleased to hear from any copyright owner who has been omitted or incorrectly acknowledged.

Appendix A

Focus Group Questionnaire and Consent

Dear Tutor

Please discuss the following questions within your focus group. These responses will be recorded. Some aspects of the transcripts may be analysed as part of my PhD study, which is investigating the interactive properties of this online B. Ed., primary degree. No identifying aspects of your responses will be used. If you are happy for your comments to be included for this purpose please sign below the questions that will lead the discussion.

Focus Group Questions

1. How many study periods have you worked for this university as an online tutor?
2. What is your highest qualification to date?
3. What are your reasons for choosing this type of work outlining your favourite/least favourite aspect of your role?
4. Do you feel supported professionally as part of your work?
5. For online learning, do you consider frequency of interactions a useful indicator for student success?
6. Does the pattern of interaction change over a study period?
7. Is interaction of greater value for some learners than others? Why might this be so and what impact may this have on your teaching?

Thank you for taking part in this important aspect of this study. If you are happy to continue to be involved, and for your recorded responses to be analysed, de-identified and included as part of the research, please sign below.

I am happy for Sheena O'Hare to use my recorded conversation as part of her research. I understand that my name will not be used to identify me. I am also aware that I can choose to withdraw from the study at any time.

Name.....

Signature.....

Date.....

Appendix B

ITQ

Name.....

Individual Tutor Interview Questions

Dear.....

This questionnaire has been emailed to you prior to our interview that will take place in a few weeks. You will be asked similar questions during your interview. This electronic version is to give you an opportunity to refresh your memory around your actions within the online discussion board prior to the interview. Please return this to me electronically before our meeting.

Questions around beliefs about teaching and learning

A. *What influenced you to become a teacher?*

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.....

B. *What makes an effective teacher?*

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C. *Are the skills of an online teacher the same as those of a face to face teacher?*

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D. *What three things would you expect from ideal learners?*

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E. *Would these three expectations be comparable to ideal online learners?*

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F. *What are the most important aspects of learning at university?*

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.....

- G. *Can you give an example of when/how online teachers should intervene to assists with student learning?*
-
-
-
- H. *How do you believe learning takes place?*
-
-
-
- I. *What is happening during the process of teaching?*
-
-
-
- J. *Is this process different for online teaching?*
-
-
-
- K. *Can you describe the way you teach online?*
-
-
-
- L. *How much guidance do you think students need to complete their university assignments?*
-
-
-
- M. *How important do you think it is for teachers and students to work together to achieve results?*
-
-
-
- N. *Can you describe an activity during the study period when you felt like you were really teaching something well? What was it about this activity that led to this feeling?*
-
-
-
- O. *How has using computer or communications technology affected your teaching?*
-
-

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P. What did you do in this unit to assist your students' learning?

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Q. From your observations, what did the students do to assist their learning?

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.....
R. What are your thoughts around the use of online technology in university teaching?

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.....
Within this study there are three areas of online teaching presence under review:

- 1. Instructional Design and Organisation**
- 2. Facilitating Reflection and Discourse**
- 3. Direct Instruction**

Considering your work within the online unit that is being researched:

1.1. What opportunities do you consider that you had to set curriculum by orienting the students to the resources provided?

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1.2. What issues did you have with managing a cohort of 75 students? Did you feel a need to create smaller groups within the larger cohort and was this something that you felt capable of doing?

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1.3. Which particular strategies did you use to keep students engaged with one another on the discussion board and how effective do you feel that you were in this regard?

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1.4. What support did you provide to ensure that students were familiar and comfortable with netiquette protocols?

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1.5. Do you consider that you had sufficient opportunity to develop and share course content resources that were not already provided within the blackboard site?

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2.1. How did you identify/deal with areas of disagreement among students?

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2.2. What strategies did you use to encourage students to reach consensus in their discussion? Do you consider that you had enough control over this process?

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.....

2.3. Much of a teacher's role might be in encouraging, acknowledging or reinforcing student contributions. Did you find this to be a large component of your online teaching role? Do you agree/disagree that this should be the case?

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.....

2.4. What particular strategies did you use to set up a learning climate where students would feel comfortable and confident to participate?

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.....

2.5. Prompting discussion can be difficult. Do you have any successful strategies that you have used to encourage discussion among your students?

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2.6. How successful do you consider that you were in keeping students involved in the discussion? Think of some examples if you can.

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3.1. Sometimes a teacher gives a ‘spark’ of information to encourage further thinking. Was this something that you used and if so, did you find it useful?

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.....

3.2. How often did you have to bring student focus back on to the task at hand? What strategies did you use to do so?

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.....

3.3 Did you make much use of summarising the discussion each week to support student learning?

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3.4. Do you feel that the feedback that you provided within the discussion board was used to its full advantage by students?

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3.5. What processes did you use to diagnose student misconceptions and to feed this back to students?

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3.6. Did you provide any of you own materials/resources to support student learning? Can you give some examples of whether or not this was successful?

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.....

3.7. Was much of your time spent addressing technical glitches or issues? Can you give some examples?

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.....
.....
.....

Thank you for your responses. I look forward to our interview.

Appendix C

Samples of Matched Indicators

handwriting to be much quicker. After completing numerous worksheets, Robbie is improving in his handwriting, so it is safe to say that the more he learns in regards to this, and therefore with inevitable maturation and gained experience, Robbie will one day be as fast as his older sister, Sheryl.

References:

Eggen, P & Kauchak, D (2010) *Educational Psychology: Windows on Classrooms 8th Edition*, Pearson Education, Inc, Upper Saddle River, New Jersey

Reply Quote Mark as Read

Thread: Case Study 1
Post: RE: Case Study 1
Author: Lillian Fawcett

Posted Date: June 8, 2011 8:43 PM
Status: Published

Great Rebecca - just a note on referencing:

1. The intext reference only uses surnames and unless you are explicitly using the author's name in your sentence then it should be inside the bracket with the year. If there are only two authors, you must write both authors' names every time (Eggen & Kauchak, 2010) OR Eggen and Kauchak (2010) argued that maturation....
2. You have used " " - indicating that this is a direct quote. Therefore, you also need the page number (Eggen & Kauchak, 2010, p.10) OR Eggen and Kauchak (2010, p.10) argued...
3. In your final reference, only the first letter of the first word of the title is capitalised and also the first letter after :
4. Place of publication goes before publisher.

3/5

EDP 155 Group 3: Wk 2 Cognition
Page | 9

Thread: Case Study 1
 Post: RE: Case Study 1
 Author: Candice Bortz

I agree with all that has been said before and would like to add that Sheryl has already 'accommodated' her writing skills into her existing skill set and therefore, her writing is more advanced than Robbie's. According to Eggen & Kauchak (2010) she has created a new scheme namely writing, in response to her experience of writing. she has already reached her state of equilibrium with regard to her writing skills. Robbie has recently experienced a disruption in his equilibrium and is in the process of regaining equilibrium as he practices his writing skills. If Sheryl then learns how to write in script she would be 'assimilating' this into her existing scheme of writing.

Posted Date: June 7, 2011 4:32 PM
 Status: Published

Reply Quote Mark as Read

Thread: Case Study 1
 Post: RE: Case Study 1
 Author: Lillian Fawcett

Can this situation be best explained by Piaget's theory of equilibrium? Why or why not?

Author: Candice Bortz
 Date: Tuesday, June 7, 2011 2:28:45 PM WST
 Subject: RE: Case Study 1

I agree with all that has been said before and would like to add that Sheryl has already 'accommodated' her writing skills into her existing skill set and therefore, her writing is more advanced than Robbie's. According to Eggen & Kauchak (2010) she has created a new scheme namely writing, in response to her experience of writing. she has already reached her state of equilibrium with regard to her writing skills. Robbie has recently experienced a disruption in his equilibrium and is in the process of regaining equilibrium as he practices his writing skills. If Sheryl then learns how to write in script she would be 'assimilating' this into her existing scheme of writing.

Posted Date: June 7, 2011 4:32 PM
 Status: Published

Reply Quote Mark as Read

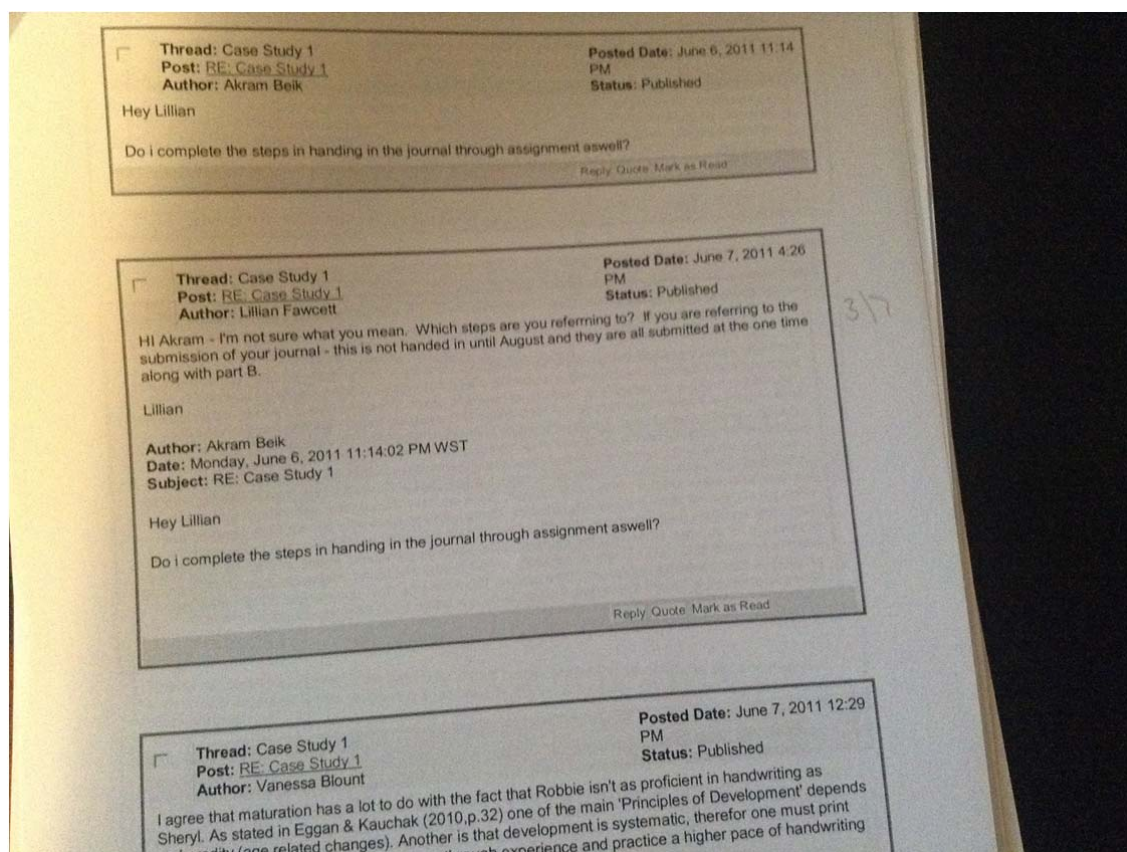
Thread: Case Study 1
 Post: RE: Case Study 1
 Author: Sumera Bint Ghazi

I think Sheryl and Robbie's situation can not be explained by Piaget's theory of equilibrium because Piaget's theory deals with cognitive thinking of an individual. For Robbie, hand writing task is not related to his cognitive thinking rather to his maturation stated Eggen & Kauchak (2010) controlled by some physical characteristics of an individual

Posted Date: June 8, 2011 10:15 AM
 Status: Published

Reply Quote Mark as Read

Eggen, P. & Kauchak, D (2009) Educational Psychology – Windows on classrooms (8th ed) Pearson International edition, New Jersey: Pearson Education



WEEK 2 – LEANNE – Indicator Table		
Code and Indicator		Totals for individual indicators
2.3 (encouraging)	****	4
2.5 (prompting discussion)	*****	17
3.1 (present content)	*****	12
3.2 (focus discussion)	***	3
3.5 (diagnose misconceptions)	**	2
3.6 (inject knowledge)	**	2
3.7 (respond to technical concerns)	*	1
TOTALS FOR WEEK 2		41

Appendix D

Information Sheet/Permission - Tutors

The Role of the Tutor in Supporting Online Engagement in Higher Education

Aim of the project: This research will be done as part of a Doctor of Philosophy Degree. This research will study in depth the interactive processes that occur within the Learning Management System's (LMS) Blackboard site, particularly focusing on the discussion board of EDP 155 – Understanding Learning. It will investigate interactions between tutors and their students. It will identify the key characteristics of those interactions, how often they occur and which of those interactions appear to be linked to high quality learning.

What will be required: This research will be conducted over one study period of 13 weeks. It will involve those tutors and some of their students who are teaching and learning in the online unit, *Understanding Learning*. Interactions between tutors and students will be monitored to identify the key characteristics of these interactional processes.

As a tutor working within this unit, you will be asked to complete a detailed questionnaire relating to your demographic information around work experience and family and work commitments. Tutor interactions will be monitored and at the end of the study period you will be asked to participate in an interview around that participation to ascertain some of your views and beliefs about online learning.

Participation in this research is voluntary and will not impact on your employability. You will be at liberty to withdraw from the study at any time without prejudice or negative consequences.

All research materials will be treated in confidence, with all identifying information about participants removed before any publication. All materials will be stored in a locked filing cabinet and will only be available to the researcher and her supervisors.

As an important outcome of this research, a clear set of guidelines will be identified that will support staff and students to gain knowledge and authentic skills that can be used in a wider context.

If you require any further information about this research please contact the researcher, Sheena O'Hare

CONSENT FORM

- I understand the purpose and procedures of the study.
- I have been provided with the participation information sheet.
- I understand that the procedure itself may not benefit me.
- I understand that my involvement is voluntary and I can withdraw at any time without problem.
- I understand that no personal identifying information like my name and address will be used in any published materials.
- I understand that all information will be securely stored for at least 5 years before a decision is made as to whether it should be destroyed.
- I have been given the opportunity to ask questions about this research.
- I agree to participate in the study outlined to me.

Name: _____

Signature: _____

Date: _____